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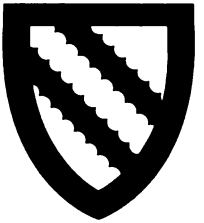

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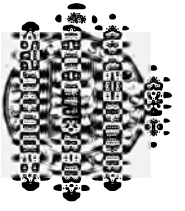

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ISABEL BEVIER.

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THE ELEPHANT IS THE GREATEST OF CENTRAL AFRICA

THE HOUSE

Its Plan, Decoration and Care

IN our study of the House it will be interesting to review briefly what is known about the earliest human habitations and the way in which the modern house has developed.

THE EVOLUTION OF THE HOUSE.

It may be well to consider what is meant by the term "the evolution of the house." One hears much in these days about evolution in plans, plants, animals. For present purposes the following definition seems best suited: "Evolution is a process in which, by a series of continuous progressive changes, a complex arrangement, agency, or organism is developed from rude or simple beginnings as the evolution of civilization from savagery; the evolution of a chicken from an egg." The evolution of the house, then, means that progressive series of changes by which the modern house has developed or evolved from an earlier and simpler form.

Simpler Forms

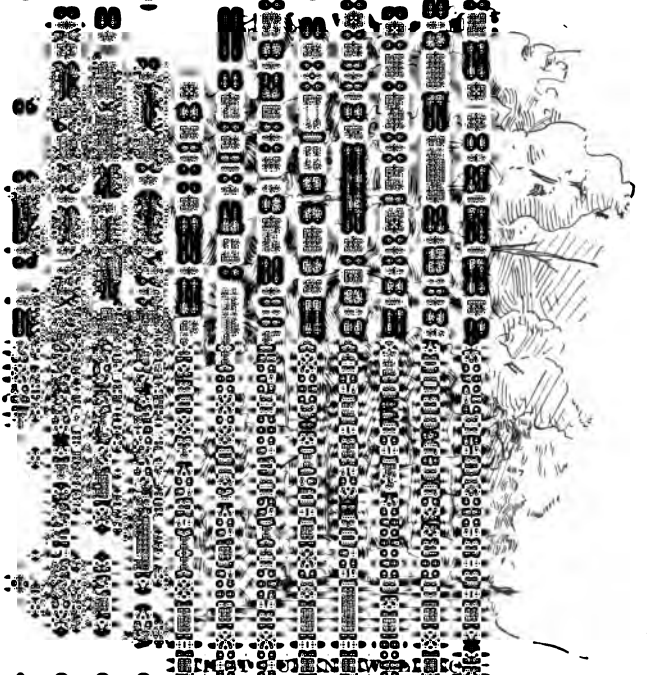
What were some of those simpler forms? The modern house has a very definite meaning to most of us, but how little we know of its beginnings. Let us go back into that dim and shadowy past and find what it can tell us about the earlier human habitations.

It is so difficult to trace beginnings even of most important events and inventions. The origin of language, the origin of the family, the earliest home of the human race, are alike unknown; so we shall not hope to find the first human dwelling, but to find types of early human habitations, and in a study of these types to be enabled to see the evolution of the modern house.

Shelter

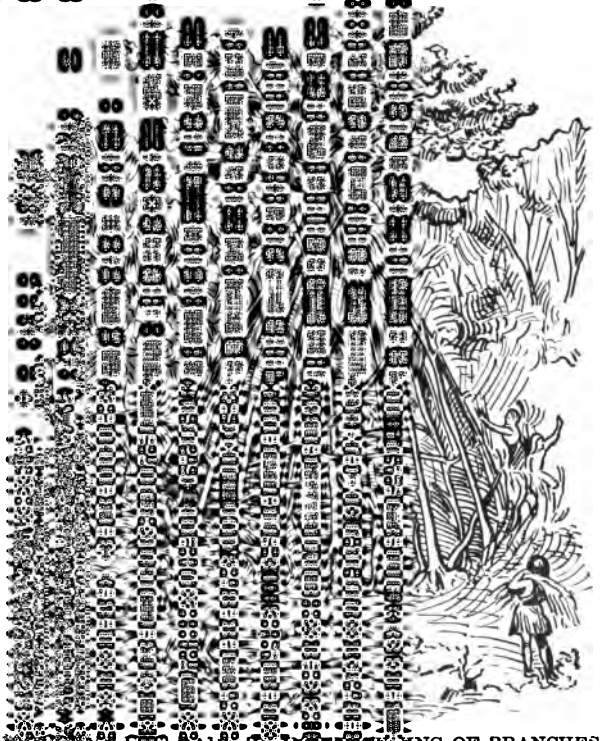
However much the modern house may differ from the earliest dwelling place, since both were destined to serve the needs of human beings, we may assume that the earlier, as the later form, has been intended to meet some primal human need. Man today needs shelter from the summer's heat and the winter's cold, protection from the wind and the storm, defense from wild beasts; so it seems most probable that his brother man in the earlier ages of the world had these same human needs. Those who have studied most about early human habitations seem quite agreed that man found his first shelter under the spreading branches of a tree. In a warm climate and in the absence of wild beasts a tree might meet his requirement for shelter from the sun's rays. Viollet Le Duc in his "Habitations of Man in all Ages," gives us a picture of this first human dwelling. Moreover we know that trees are now occupied by tribes in Central Africa and South America.

[illegible] the branches [illegible] hed roof for [illegible] iollet Le Duc



[illegible] en suggested [illegible] s of the tree [illegible] are not found [illegible] place to place.

[illegible] of habitation is [illegible] and the pasture a

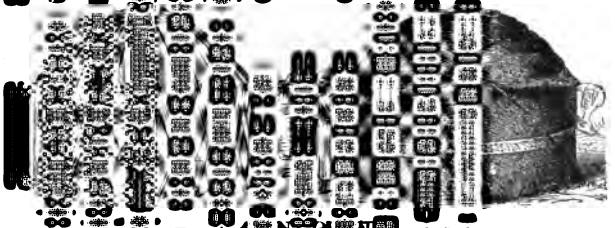


[illegible] ING OF BRANCHES

[illegible] A small amount [illegible] rk or support and [illegible] iness and ease of

Tents

[illegible] irable dwell- [illegible] door of his [illegible] booths at the



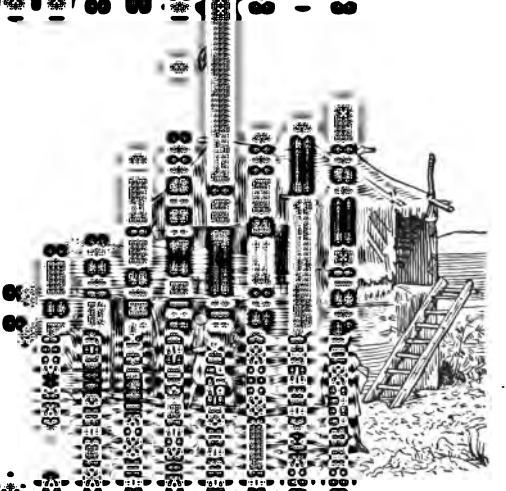
[illegible] en Straw

[illegible] And ye shall [illegible] goodly trees, [illegible] of thick trees [illegible] dwell in booths

Caves

[illegible] ature has pro-

[illegible] the cave in the rock [illegible] sary to drive out [illegible] be used by man. [illegible] in the "dugout"



[illegible] WITH SKINS

[illegible] "dugouts" are neither [illegible] cabin which has [illegible] many pioneers. The [illegible] universal form of early [illegible] among primitive and [illegible] parts of the United [illegible]

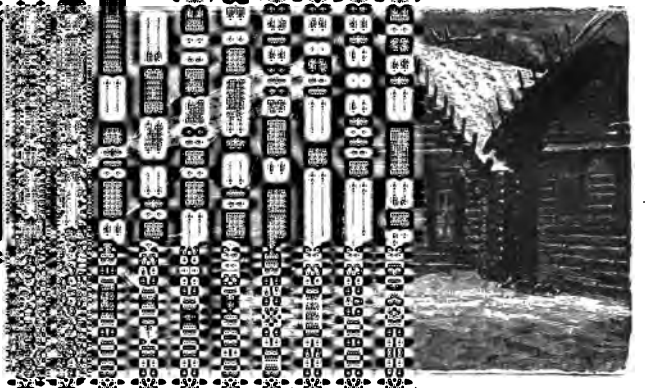
[illegible] habitations are of in- [illegible] first: The pueblos;

[illegible] ge and is ap-
[illegible] They con-
[illegible] y be entered
[illegible] ladders and
[illegible] ple, so these

[illegible] ROOMS

[illegible] to their occu-
[illegible] stone carefully
[illegible] and mud. They
[illegible] They con-
[illegible] tenty or more
[illegible] e rooms com-
[illegible] rs, and some
[illegible] dmitting light

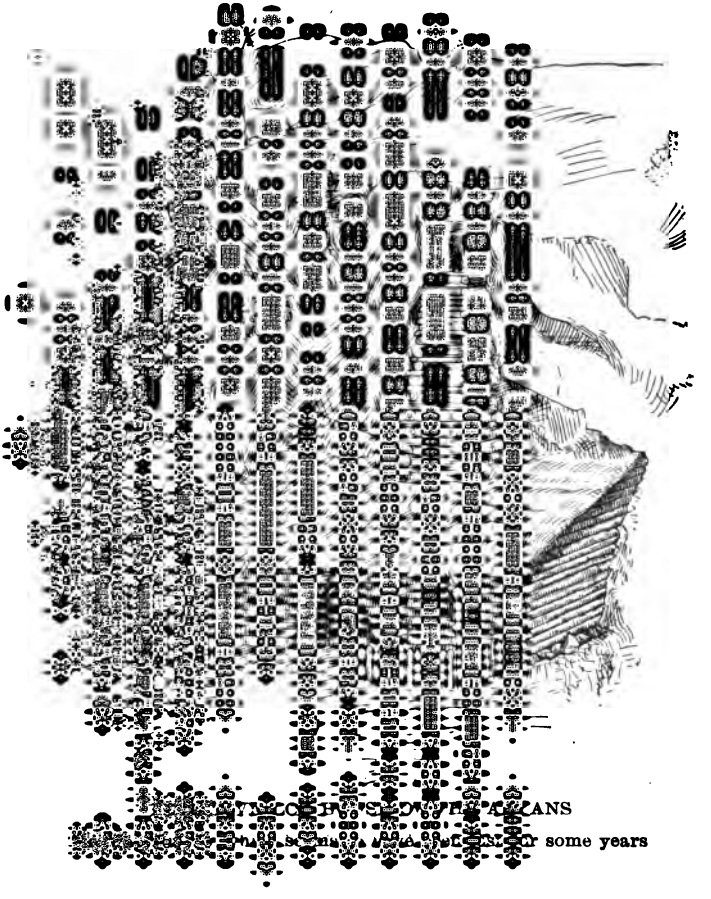
[illegible] of a modern In-
[illegible] 1881. "Before us,"
[illegible] ws of these adobe
[illegible] outward, no doors,
[illegible] ofs are reached by
[illegible] windows and doors
[illegible]



[illegible] PEASANTS

[illegible] an only be reached
[illegible] Each house is thus
[illegible] er once withdrawn,
[illegible] ate."

[illegible] cells in these habi-
[illegible] ats had a communal
[illegible] s speak of the morn-
[illegible] ade at dawn by the
[illegible] be an act of wor-



THE COMPLEX OF THE ALTANS
A [illegible] for some years

W MEXICO

ssignment of the day's
ing in the pueblo.
ion which in general
pueblo are the cliff

House in a Rock

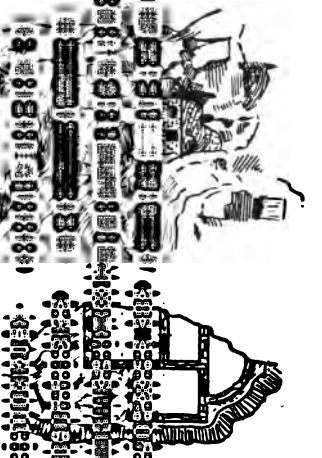
atisfactory dwellings to
of light and heat, the

provision for

what a mod-

dwellings,

Swiss, Grecian,



Cliff House
Rooms

More than Shelter

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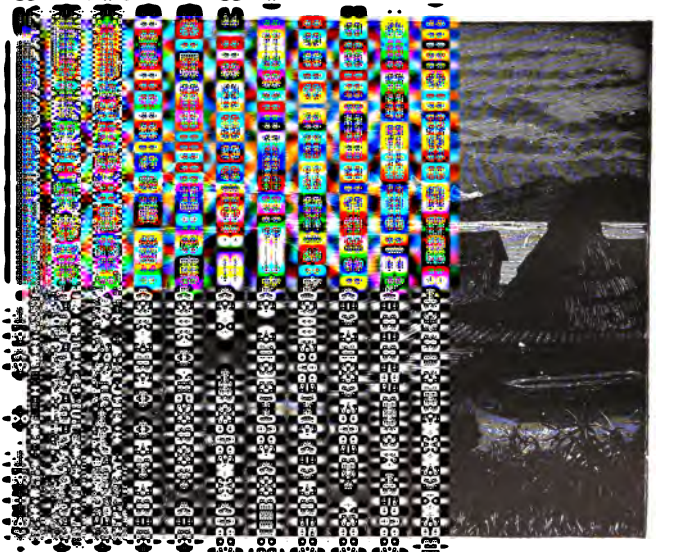
ing came to

lter. More-

climate, the

[illegible] all had a part in [illegible] that was built in [illegible]

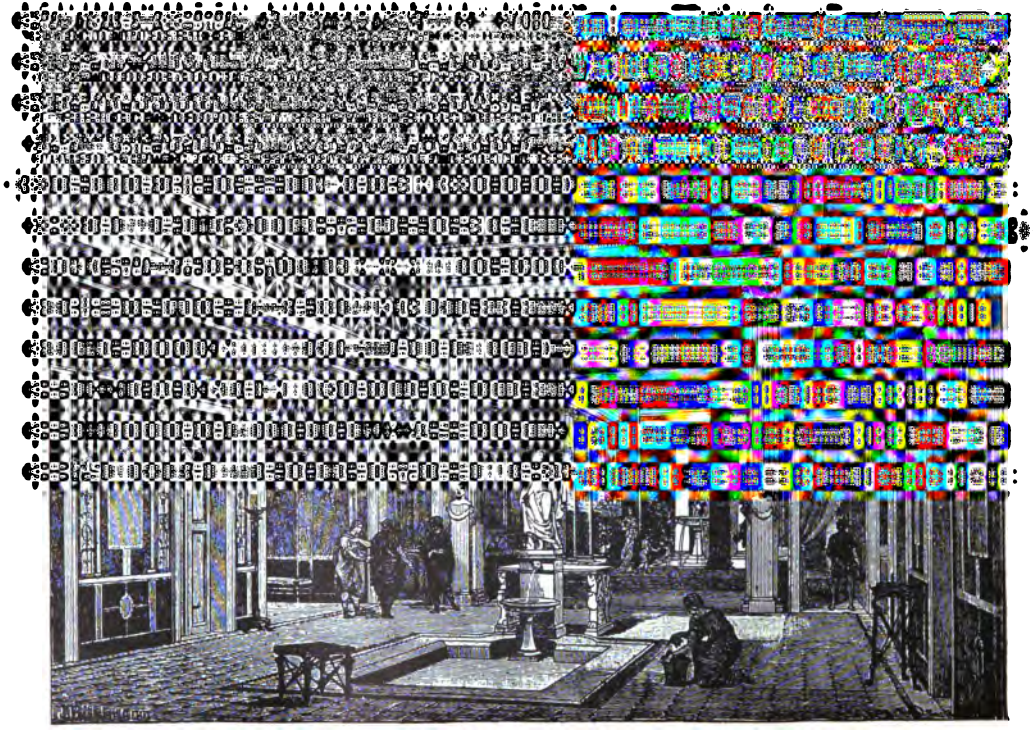
[illegible] of the people seem [illegible] of temples rather



[illegible] ERLAND

[illegible] om the indications [illegible] and it were almost [illegible] the dwellings were [illegible] with stone floors. [illegible] family life is very

(Photograph.)



RESTORATION OF INTERIOR OF A ROMAN HOUSE

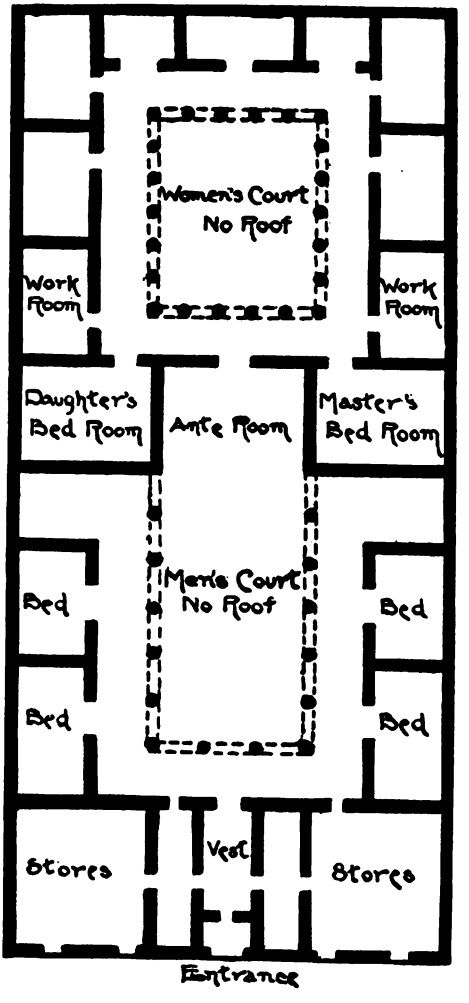
The Ornament on the Walls Painted in Vivid Reds, Browns, Blues and Yellows

evident. The two principal divisions are the courts for men and women. The seclusion and separation of the women is shown in the general plan. It is said that the Greek woman of the wealthy class was not expected to leave her home more than about once a year; that she never appeared at dinner with her husband if a guest were present.

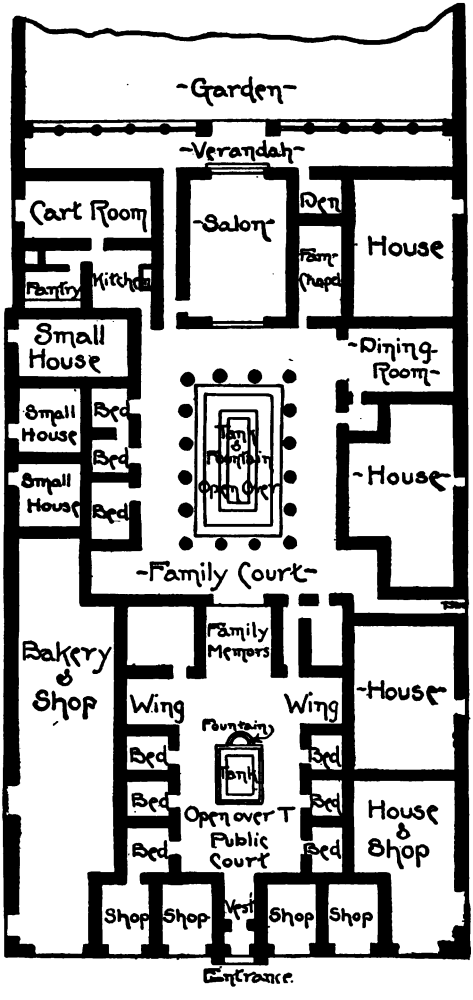
We see in the plan given the combination of the shop or small store with the dwelling. The entrance is guarded by the porter. The vestibule leads into the men's court about which are the bedrooms for the men. The anteroom separates the women's part from the men's, and about the women's court are various rooms in which the house work is done. There seems to have been no general room for both men and women. The house was sometimes two stories. In that case the women's apartments were in the second story.

Roman Houses

We are indebted to the ruins of Pompeii for the knowledge we have of Roman houses. These houses were derived from the Greek house with its two courts. The plan shown is evidently the house of a wealthy man. We see here the combination of the shop and small house with the larger house. There is the family court and the public court. One has said that the Greek house was made for the use of men and women, the Roman house for public and private life. The house occupied a block. The outside was rented to tenants and used either as shop or

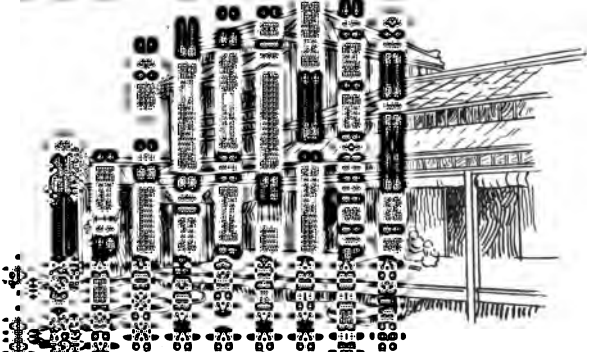

Women's Court
No Roof
Work Room
Work Room
Daughter's Bed Room
Ante Room
Master's Bed Room
Men's Court
No Roof
Bed
Bed
Bed
Bed
Stores
Vest
Stores
Entrance

GREEK HOUSE


-Garden-
-Verandah-
Cart Room
-Salon-
Den
House
Pantry
Kitchen
Small House
-Dining Room-
Small House
Bed
Bed
Small House
Bed
Tank & Fountain Open over
-House-
-Family Court-
Family Members
Bakery & Shop
Wing
Wing
-House-
Fountain
Bed
Tank
Bed
Bed
Open over T Public Court
Bed
House & Shop
Bed
Shop
Shop
Vestibule
Shop
Shop
Entrance

ROMAN HOUSE

[illegible] entered about the [illegible] wood finished with [illegible] were no windows, [illegible] and drainage. The [illegible] ning charcoal, and [illegible] man loved display

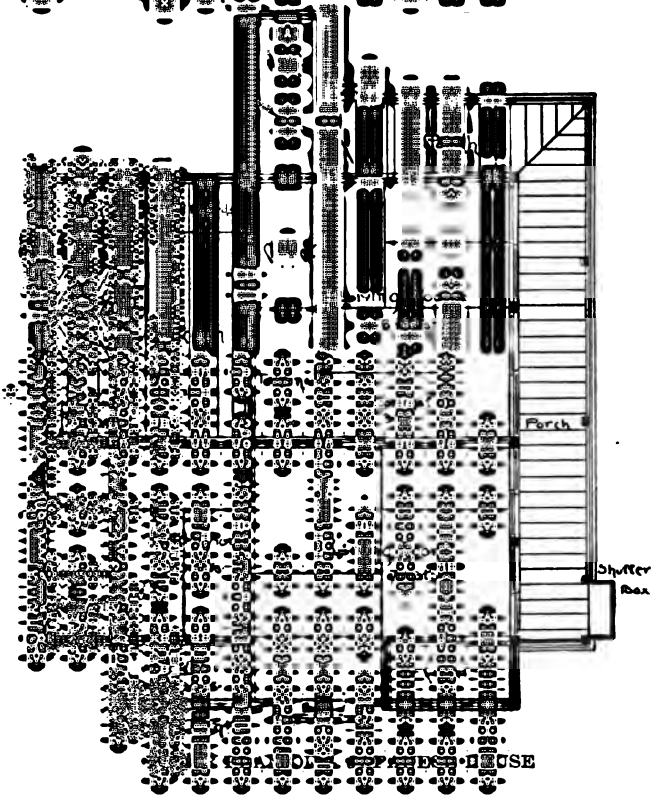


[illegible] HOUSE

[illegible] was spent in the [illegible] woman enjoyed [illegible]

[illegible] wood with tile roof [illegible] of sliding shutters [illegible] anywhere. The [illegible] number of mats. [illegible] 3 x 6 ft. There [illegible] nese house because [illegible] ed into a bedroom

[illegible] This practice [illegible] American be- [illegible] dingly clean

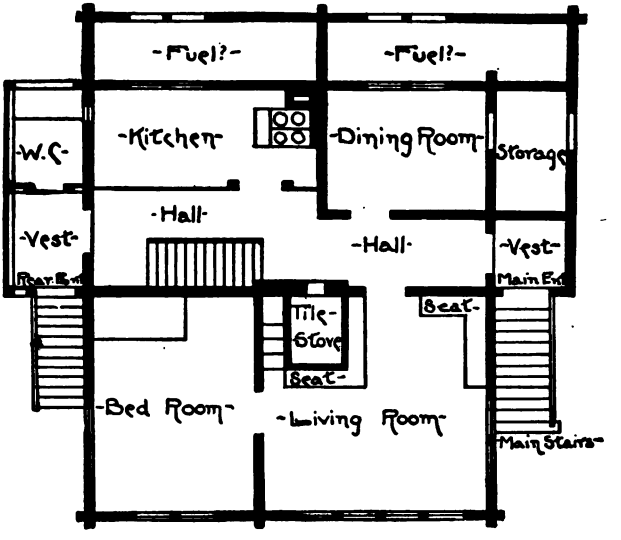


[illegible] ing the house, so [illegible] in.

[illegible] ent purposes. No [illegible] tables. Charcoal [illegible] the kitchen utensils [illegible] t under the floor. [illegible] pden verandah is [illegible] sed by shutters.

[illegible] Swiss houses are [illegible] most entirely of [illegible] The lower story is [illegible] nry and the base- [illegible] sometimes used for [illegible] nd for the domestic [illegible] Timbers of the [illegible] tory project, form- [illegible] el windows.

[illegible] ummarize this sec- [illegible] We see that through [illegible] nturies there has [illegible] progressive series of [illegible] in human habita- [illegible] From the shelter [illegible] by a tree, the tent, [illegible] and the log cabin [illegible] Greek and Roman [illegible] stle, to the modern [illegible] marked at various [illegible] se elements which



SWISS HOUSE, SECOND FLOOR PLAN

enter into the modern house. The thatched and stone roofs have been replaced by slate and wood. Here the window has been introduced; there the chimney. The ladder has been replaced by a beautiful staircase. Provision has been made for heat and light. The artist and architect have combined to make the modern house not only the place of shelter but the place of beauty as well.

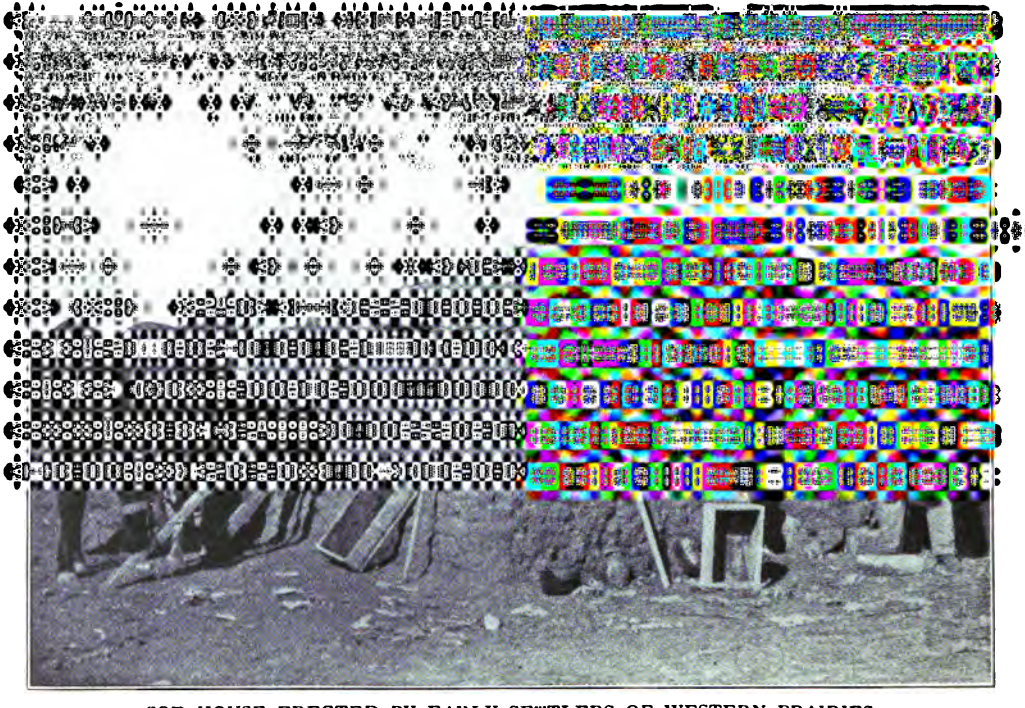
DEVELOPMENT OF THE AMERICAN HOUSE

Civilization and Architecture

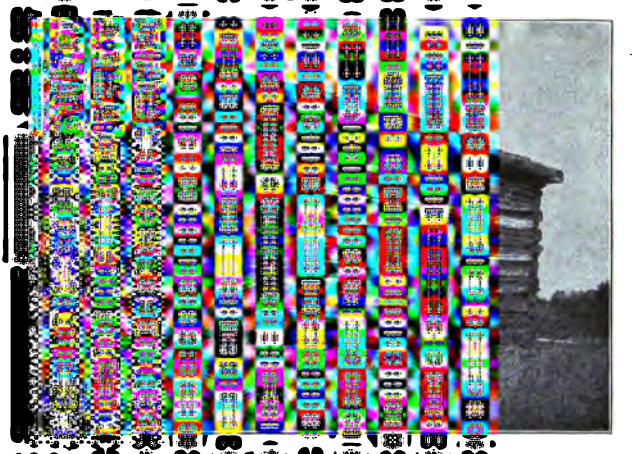
In the previous section some steps in the evolution of the house have been briefly outlined. It is evident that social conditions and climate influence the character of the buildings of a country or nation. So we have what are called the characteristic buildings of different nations. For example: Egypt is noted for its temples and towers; Assyria for its palaces; Greece for its temples; Rome, for its bridges and aqueducts; mediæval Europe for castles and churches; the Low Countries, for their trade halls; England, for its country houses, and the United States, for its fine office and municipal buildings. So we realize the truth of the statement that much of the civilization of a country can be read in its architecture.

Conditions Influencing American Architecture

It may be well to consider how social conditions and tradition have influenced American architecture. In a new country there is less of conventionality, greater freedom of action, more originality in the manner of conducting affairs, often less wealth and fewer class distinctions than in an old and well established community. Judged by the standards of the old world America is a very new country. When its resources were undeveloped and its people had little wealth its life and its houses were very simple, limited for the most part to the necessities, but as the development progressed, life became more complex, more influenced by the traditions of these lands whose descendants had



SOD HOUSE ERECTED BY EARLY SETTLERS OF WESTERN PRAIRIES



WAS BORN
Chimney on the End
Roughcast

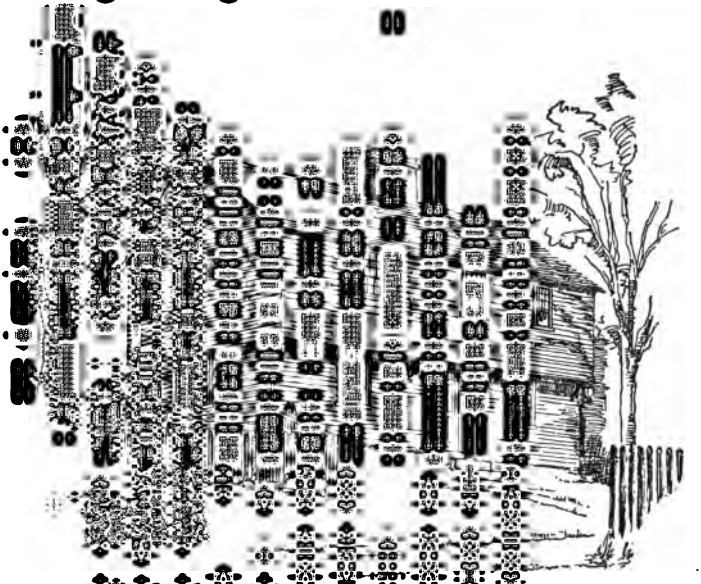
has always
one class, but
some of these
ied, irregular,
Americans are
comfort and
house or shop.
the old world,
, do not ap-
mp and cold;
pean dwelling

Comfort and Convenience

has not been de-
reasures and splen-
s in the old world,
itecture was sadly
hat builders should
which were used
ever, that many of
life and customs
castle, for instance,
ple life of America.
manor is not suited to

ASS., BUILT IN 1686

From "Homes of Country and Country'
Copyright, 1906, by Dodd, Mead & Company, Publishers



[illegible] at and Sides

[illegible] Americans wish the [illegible] up to sta- [illegible] so the newer [illegible] rmed by tak- [illegible] r, and beauty [illegible] d using them [illegible] are suited to

[illegible] the earliest home of [illegible] the early houses was [illegible] ed in the number of [illegible]

[illegible] ing and Long Sloping Roof [illegible] ses"

[illegible] o sides and placed [illegible] structure was high [illegible] k about in it. The [illegible] led with mud. The [illegible] with straw or reeds. [illegible] sticks, and plastered [illegible] of stones or brick

Beginning of Half Timber Work

developed from log boards—a be- ing descrip- the period

the "Lean-to"

"Old Colonial" House

type, having inner walls, small portico. of heavy which served outside walls to add to summer. Ice

[illegible] Dormer Windows.

[illegible]"

[illegible] reached through a trap-[illegible] hand-cut wood shingles [illegible] and other materials [illegible] the several colonies, [illegible] to show individ-[illegible] suggestive of their [illegible] houses were especially [illegible] roofs with heavy [illegible] cornice on the ga-[illegible] their houses of stone [illegible] solid panel shutters." [illegible] colonial houses are [illegible] founded on English

New England
Old Colonial

rge estates

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There were

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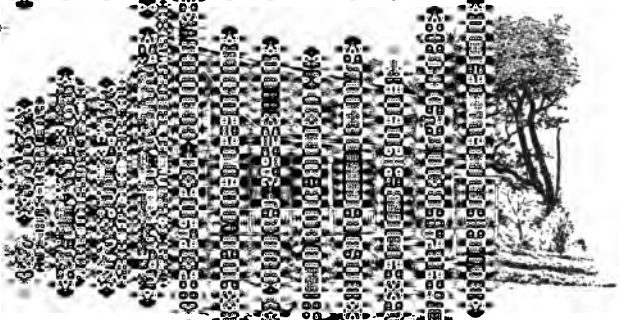
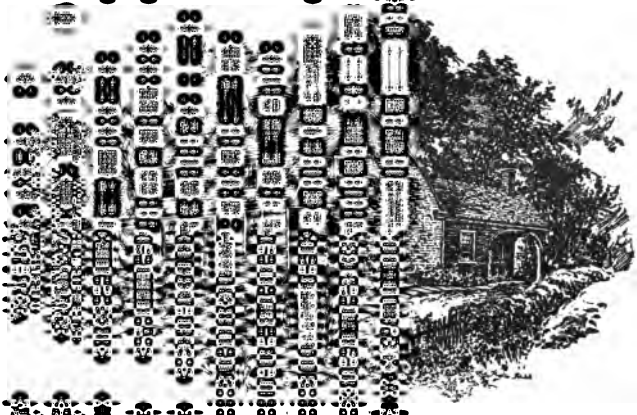


[illegible] Mansion, Long Island, N. Y.

[illegible] hospitality for which [illegible] is one of the most [illegible] said that Jefferson [illegible]

[illegible] of a central two- [illegible] The wings were



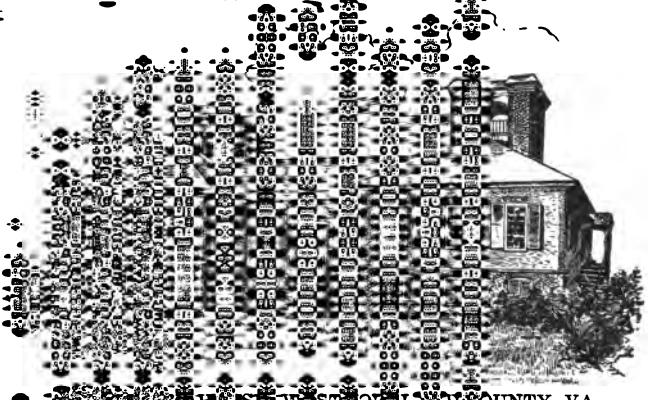
[illegible] ith Gambrel Roof and "L"
[illegible] untry"

[illegible] sometimes for domestic [illegible] wood was so much [illegible] colonist clung to his [illegible] so that they were slow [illegible] much needed for pro- [illegible] American summer is [illegible] up old ideals. The

[illegible] colonial house [illegible] room, dining [illegible] all the house [illegible] mmon life of [illegible] and to it the [illegible] rniture were [illegible]

Limitation of Colonial Builders

[illegible] in materials [illegible] wood, and paper, [illegible] ters were the [illegible] work of the [illegible] recognition. [illegible] work in the [illegible] who had left



[illegible] OUNTY, VA.

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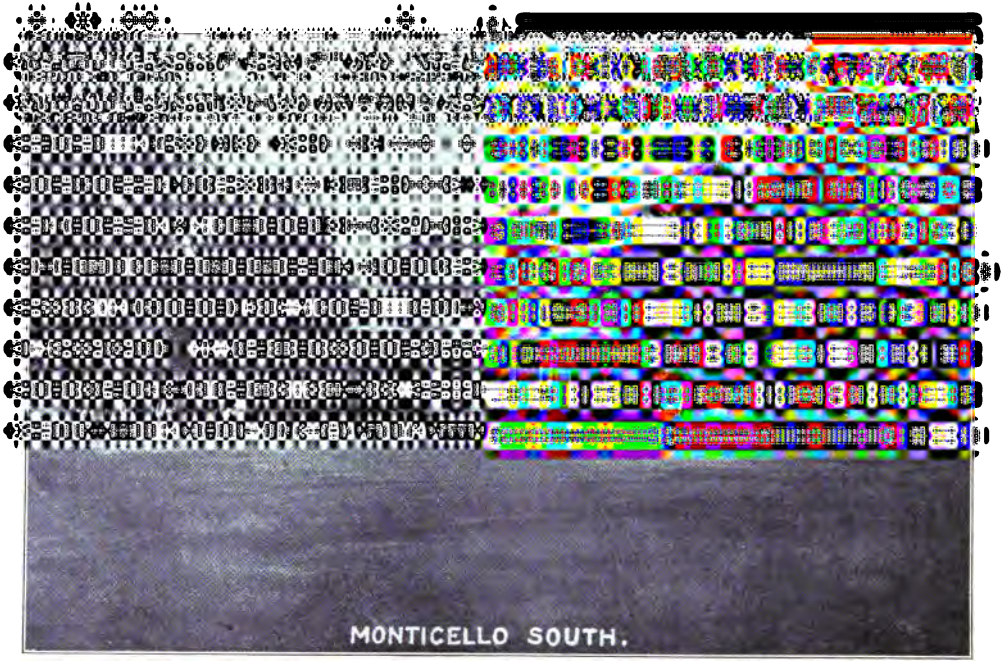
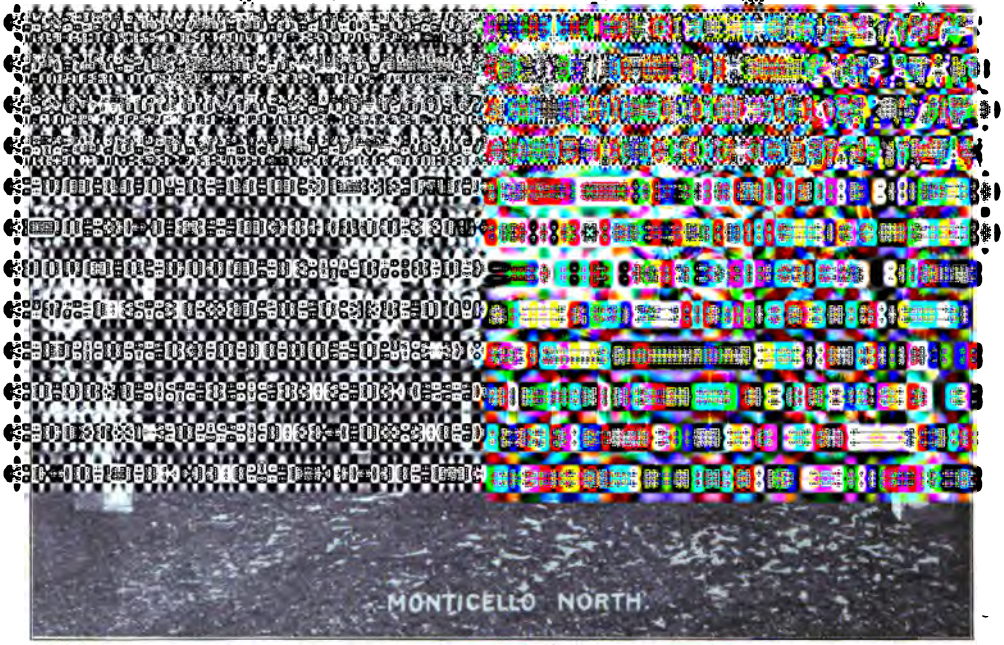


THE HOME OF THOMAS JEFFERSON



CLASSIC COLONIAL. TYPICAL OF THE HOUSES OF THE SOUTHERN PLANTERS

their ships for a season. Desmond and Croly say: "Colonial architecture has well been defined as 'the carpenters' interpretation of the Renaissance.' In no other country was the carpenter permitted a rendering of the great classic revival.

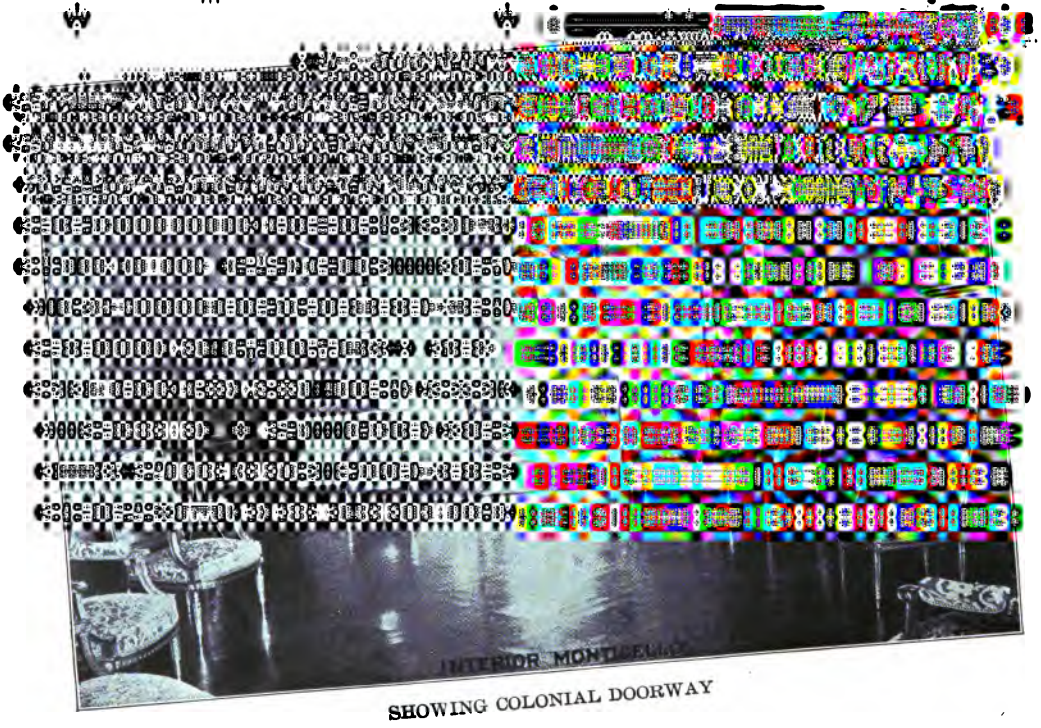
Influence of the Carpenter

"The predominance of the carpenter rather than the mason, arising immediately from the great variety and abundance of native American woods, is from the start one of the most important facts connected with American architecture and to the present day it has not lost its importance. In structure and ornament the American house has been made largely—too largely—of wood. In colonial times, while a good tradition prevailed, the use made of the material was acceptable; but later when the craftsmen had deteriorated, the excessive importance granted to a building material that is flexible, cheap, and tempts the unwary into multiplying members and elaborating detail, was partly responsible for some of the most grotesque wooden malformations which the world has ever seen. Moreover, our wood work, founded as it was upon forms that pertained properly to the masons' materials, has always betrayed a leaning toward a decadent principle, which has not been without a generally corrupting effect upon American practice."*

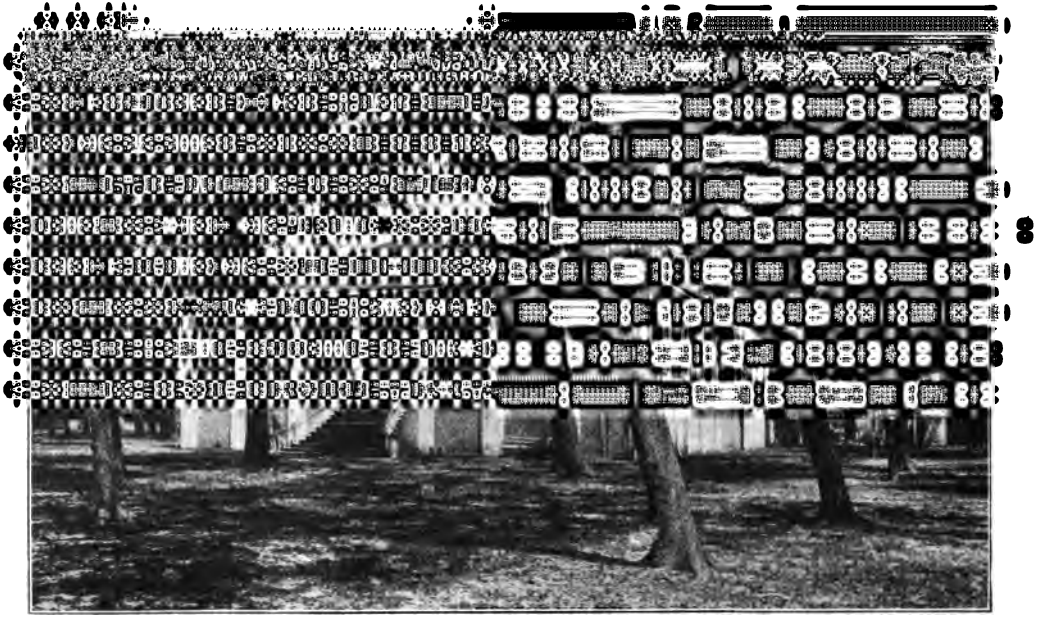
Careful Detail

The Colonial architecture was characterized by carefulness in detail, by a considerable use of moldings as

*"Stately Homes in America."



SHOWING COLONIAL DOORWAY



A SOUTHERN COLONIAL COUNTRY HOME
"Beauvoir," the Residence of Jefferson Davis

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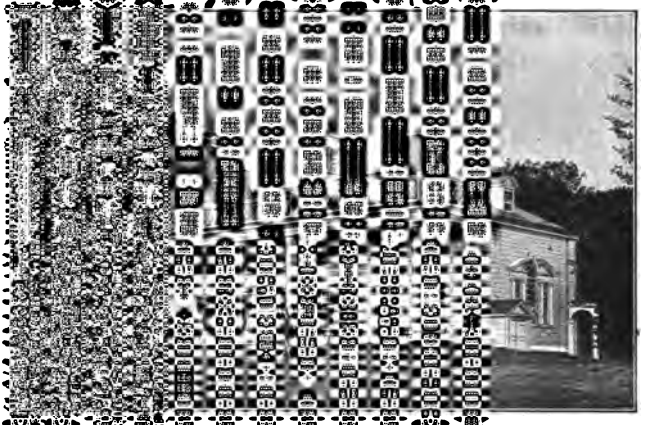

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because it was used in the colonies for something over a century; and because throughout all that time it prevailed absolutely. The owners of these Colonial houses were nothing more than ordinarily well-to-do men who had enough money to live in a pleasant and generous manner, but who very distinctly could not afford any considerable extravagances; consequently, while they built substantially they were also obliged to build economically. One of these old brick houses frequently took many years to erect, and required on the part of the owner and builder the utmost patience and the utmost ingenuity in overcoming obstacles. They did not have the benefit of expert assistance; there were practically no professional architects in the colonies until the very end of the colonial period; and they were engaged almost exclusively in the design of public buildings. The only assistance upon which a man who wanted to build could rely was that of trained mechanics, who were frequently imported for the purpose, and who naturally built according to rule. That under so many disadvantages the result was often so admirable, is most excellent testimony to the training of the eighteenth century hand craftsmen. They had been educated in a good school; they knew how to do certain things only, but everything they did was well done; and if their tradition and method of work had only survived for two or three generations, we Americans would have been spared a caution of ugli-

Substantial and Economical

HOUSE AT GLOUCESTER, MASS.

New England Town House with Gambrel Roof
Photograph by E. Q. Sylvester, Boston

BIRTHPLACE OF OLIVER WENDELL HOLMES

A Colonial Gambrel Roof House of Greater Size and Pretensions

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Deficiencies of the Old Colonial Style

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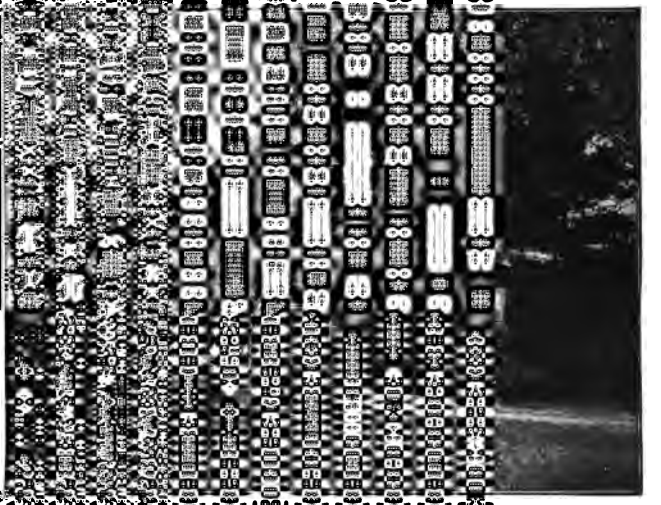

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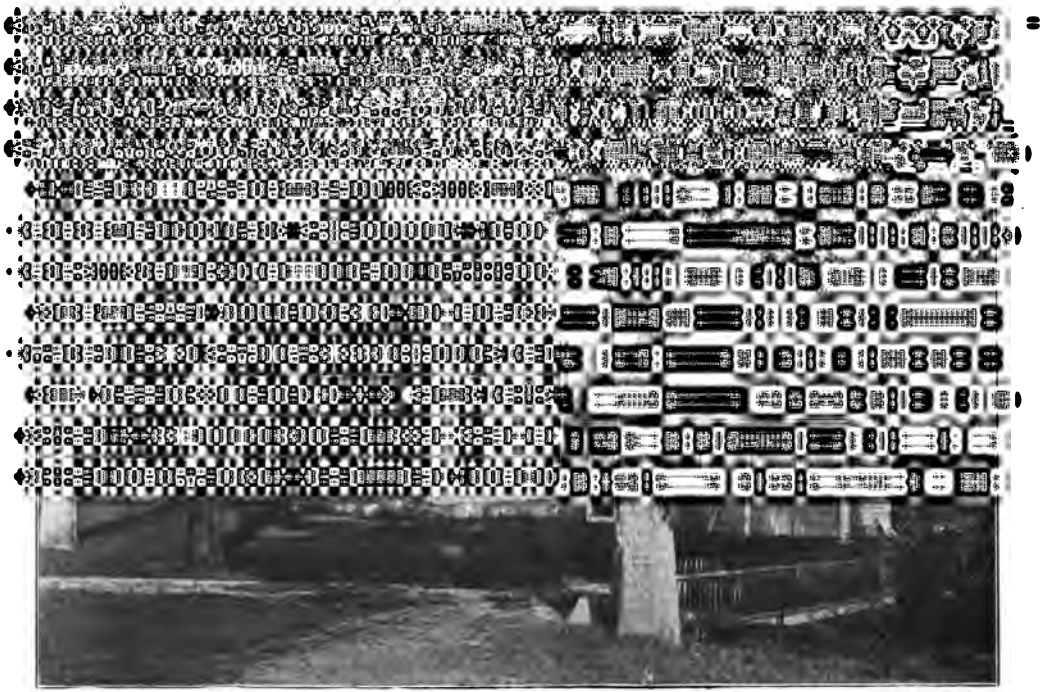
cept the colonial tradition too seriously. Both as regards outside and in, the excellence of the colonial dwellings depended on their decorous and unobtrusive character. They aimed studiously at under-statement. Their owners were people of taste, in whom the ideal of respectability was still fortunately allied with some notion of good form, and who would not for the world do anything to violate the prevalent proprieties. But it lacked structural and functional character; its range of expression was extremely limited. It is associated somehow with a tea table respectability, an old maidenly reserve and propriety; it is quaint and stiff and charming, but it lacks the richer tones, the deeper harmonies, the grander style of some French and Italian models. It remains, nevertheless, one of the best sources from which to derive the forms of a modest and inexpensive modern dwelling, for its designs are simple, its material cheap, and the character of its expression adapted to the houses of quiet people of good taste without much originality."*

Lacking in Breadth of Style

Transitional Period

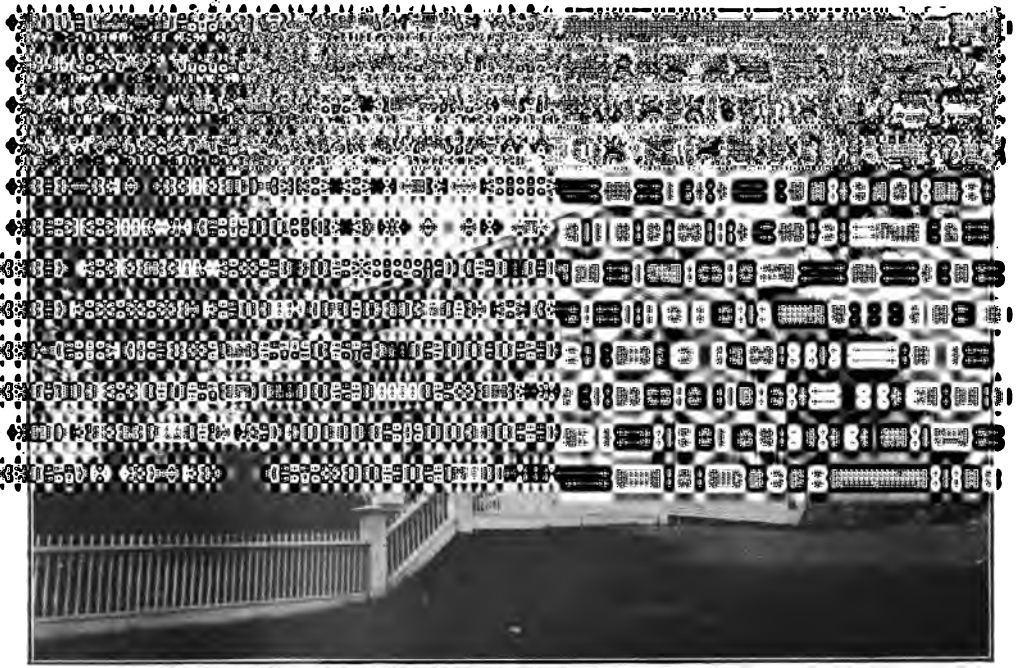
What might be called the decadence of the colonial style of architecture, or the transitional period, began in the early part of the nineteenth century. The White House is among the last and best known examples of pure Colonial. The times were revolutionary in more senses than one. New social and economic forces were at work. The people were trying experiments in government and business. The condition of the country

*"Stately Homes in America."



A COLONIAL COUNTRY DWELLING

The Comfortable New England Farm Type
Photograph by E. Q. Sylvester



COLONIAL HOUSE, NORWALL, MASS.

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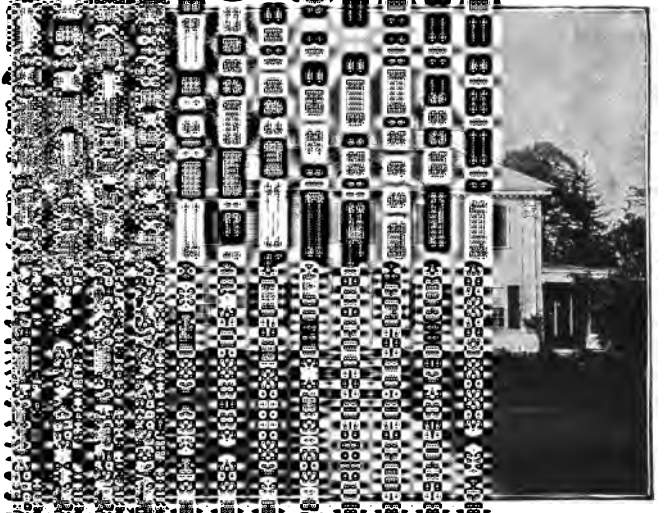

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An Example

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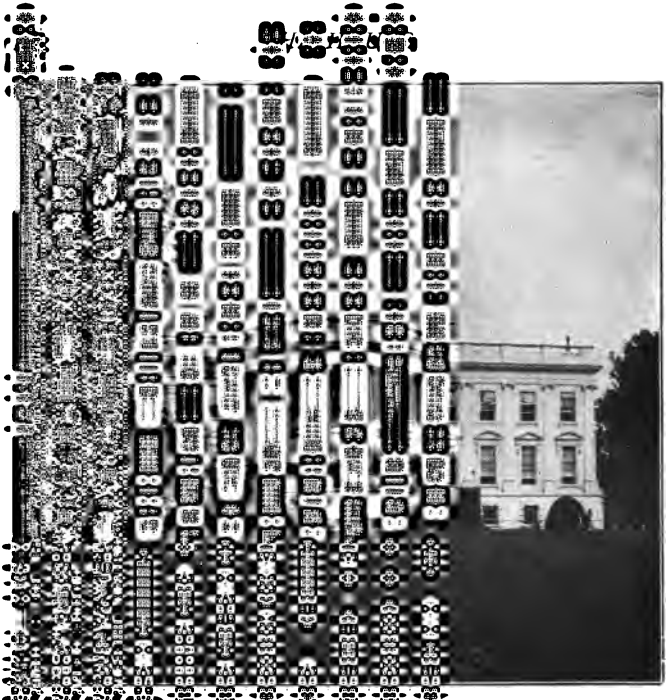

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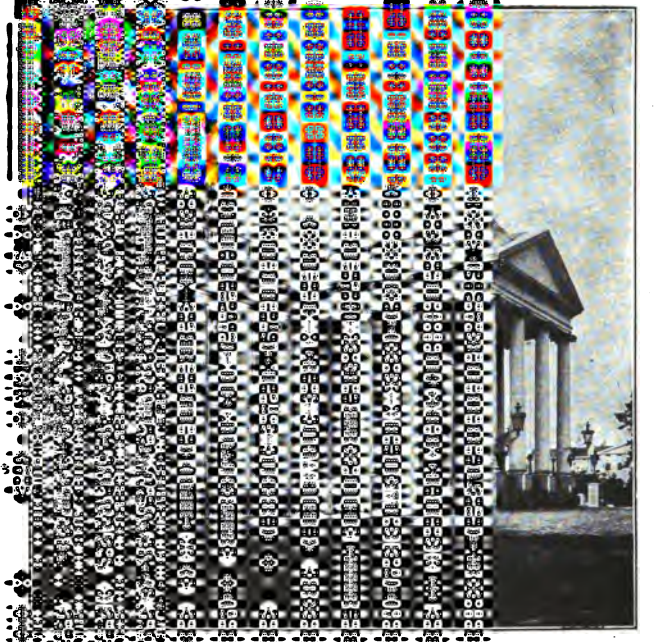


THROUGH GATE THE HOUSE

strongly marked. Various localities have also their distinctive types. Root says: "In the growth of their plans Western city houses have tended also toward greater enlargement and importance of the living and dining rooms at the expense of the parlor and reception rooms."*

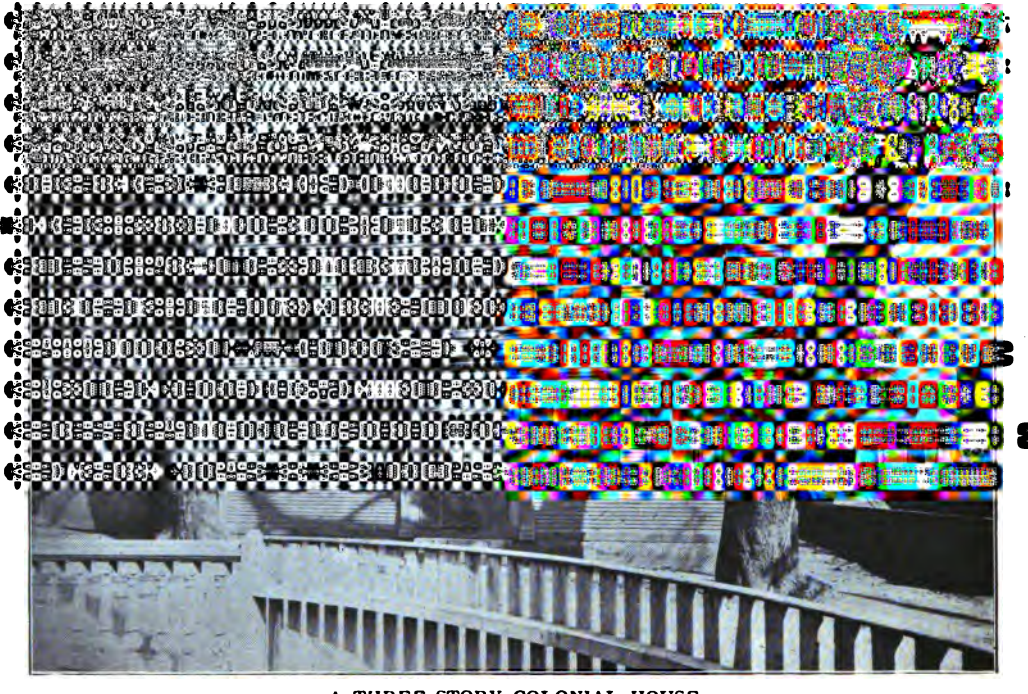
Western City Houses

One feature in the plans of Western city dwellings must be clearly defined. This is their openness. Not only are windows upon the average larger than in the East, but they are more frequent.

Price says: "The ordinary older cottages, those of a quarter of a century ago, were generally planned with a single entrance facing the approach; this opened from a porch into a passage rather than a hall, with the stairway starting a few paces within and running straight up the side wall to the floor above; the parlor and library to right and left, with the dining room beyond the one and the kitchen beyond the other. Between the last two came the butlery and servants' stairs and the back door, which usually in the family life of the occupants became the thoroughfare to and from the house. This, pure and simple, was the general plan from which the house of to-day started. Step by step it developed; the passage became a hall; the staircase changed its position; the parlor became less important, the fireplace more so."*

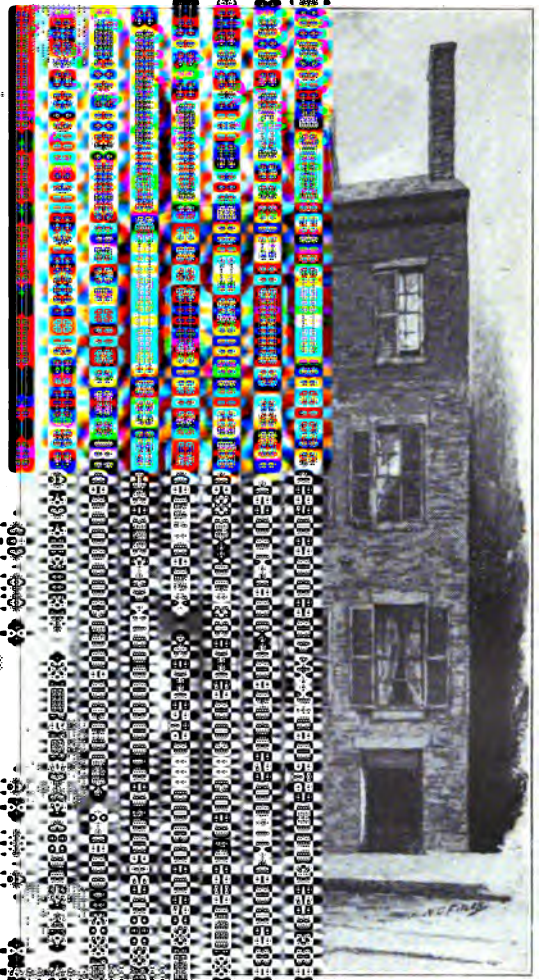
So much, or rather so little, out of all that might be said for the evolution of the house in the United

*"Homes in City and Country."



A THREE-STORY COLONIAL HOUSE

Typical of the New England Town Type, Common in Salem, Portsmouth, Newburyport, etc.



[illegible] IN BOSTON

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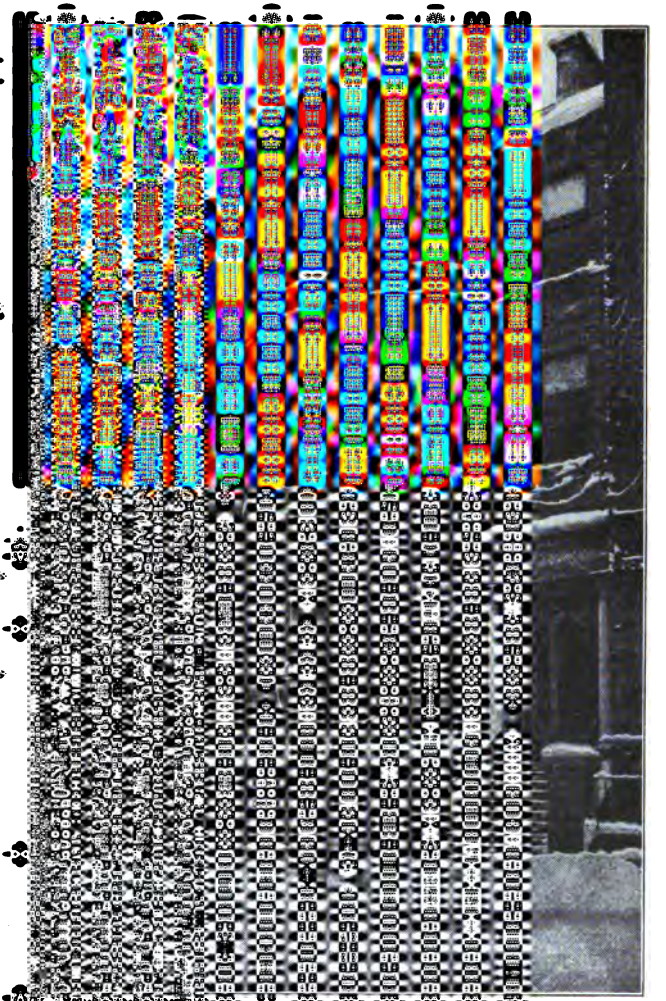
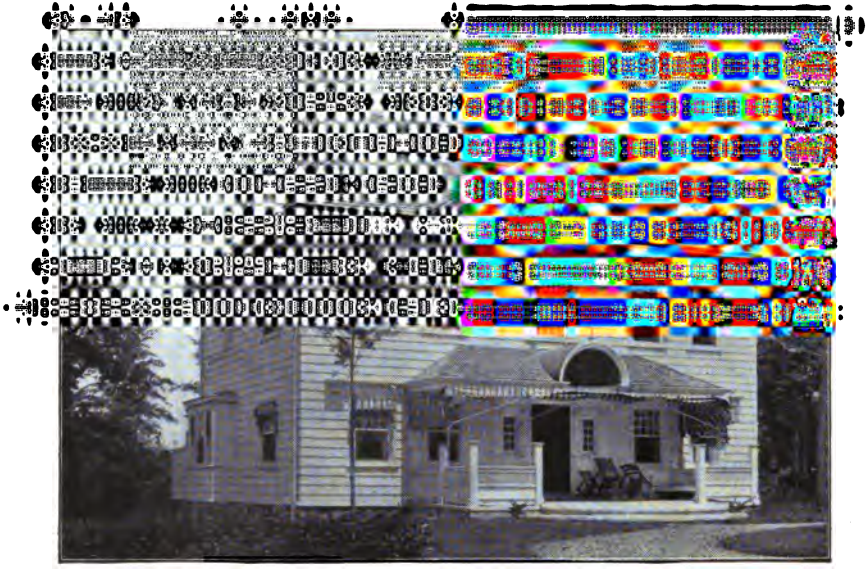


THE OLD STATE HOUSE, BOSTON, BUILT 1840



EXAMPLE OF A MODERN COLONIAL HOUSE

Porch Treatment Typical of Old Colonial House in Pennsylvania
Joy Wheeler Dow, Architect

States. Let us next consider certain essentials in planning for one of these modern houses.

BIBLIOGRAPHY

A further knowledge of the "Evolution of the House" and the "Development of the American House" may be obtained by reference to the following:

The Habitations of Man in All Ages. Viollet LeDuc.
L'Habitation Humane. Garnier and Amman.
Prehistoric America. Nadaillac.

American Renaissance ($4.00). Joy Wheeler Dow.
Early Connecticut Houses ($4.00). Isham and Brown.
Homes in City and Country ($2.00). Sturgis, Root, Price, Mitchell, Parsons and Linn.
Stately Homes in America ($7.50). Desmond and Croly.

Note.—Any of the above books will be purchased and forwarded on receipt of the price given.

TEST QUESTIONS

THE HOUSE

Its Plan, Decoration and Care

PART I

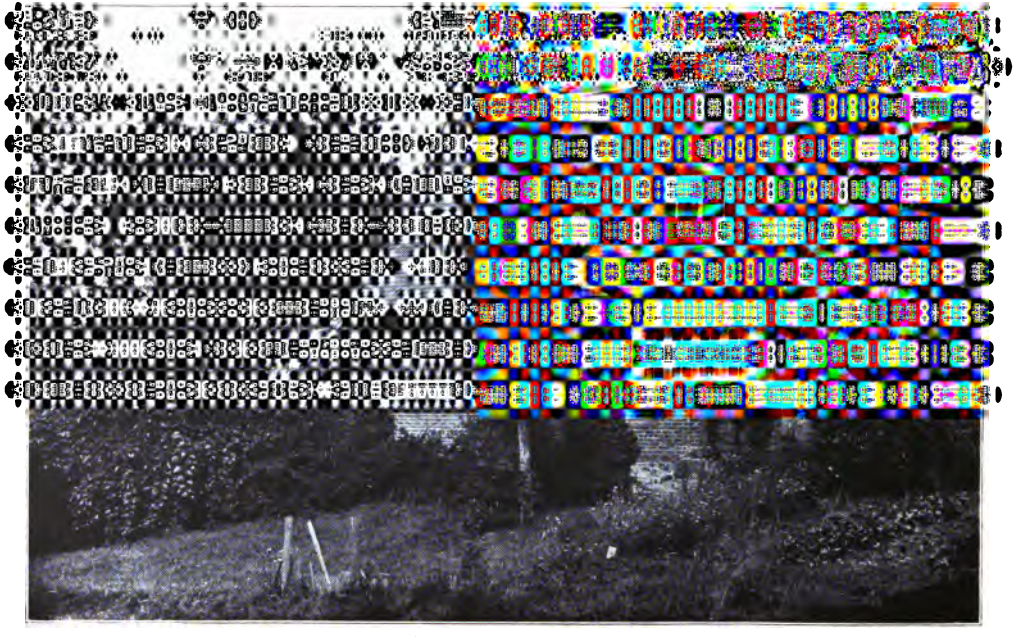
Read Carefully. Place your name and address on the first sheet of the test. Use a light grade of paper and write on one side of the sheet only. *Do not copy answers from the lesson paper.* Use your own words, so that your instructor may know that you understand the subject. Read the lesson paper a number of times before attempting to answer the questions.

---

1. What interest or value has the "evolution of the house" for you?
2. Name some of the types of early human habitations. What purposes are they supposed to have served?
3. Show how the environment influences the character of the dwelling place.
4. Explain the statement—The history of a nation may be read in its architecture.
5. What do you learn from a study of the Greek and Roman houses about their *family* life?
6. Mention some advantages of Japanese houses.
7. What conditions and influences affected the development of the American house? How did the Northern houses differ from those in the South?

8. Trace briefly the development of the house from the log cabin to the houses of our grandparents.
9. What good points had the so-called Colonial houses? In what were they lacking?
10. Describe some house in your neighborhood that exemplifies the deficiencies of the transitional period of American architecture.

NOTE.—After completing the test sign your full name.



A MODERN DESIGN FROM OLD ENGLISH AND DUTCH FARM HOUSE MOTIVES.

Joy Wheeler Dow, Architect.

THE HOUSE

Its Plan, Decoration and Care

PART II

THE MODERN HOUSE

While the subject is "The House," it is almost impossible to separate it in thought from the home for which it stands. We all appreciate that the house is not the home, as the body is not the spirit, but as the body serves as the means of expression for the spirit, so in the houses we build and furnish we show our appreciation of beauty or the lack of it. We give, quite unconsciously perhaps, our definition of home.

The House and The Home.

All this thought and care then is to be expended upon the house, not only that it may be a comfortable and convenient workshop for home industries, but also a place in which child life may develop among artistic and beautiful surroundings, and that it shall at the same time serve as a place of rest and inspiration for the older members of the family.

There should, then, be a very definite idea in the mind of the owner of the amount of money he wishes to expend and the kind of family life he wishes to maintain in this house. It is to be built for his family, not his neighbors. The real comfort and convenience of the family are not to be sacrificed to display for the chance guest. Comfort may demand that the expense

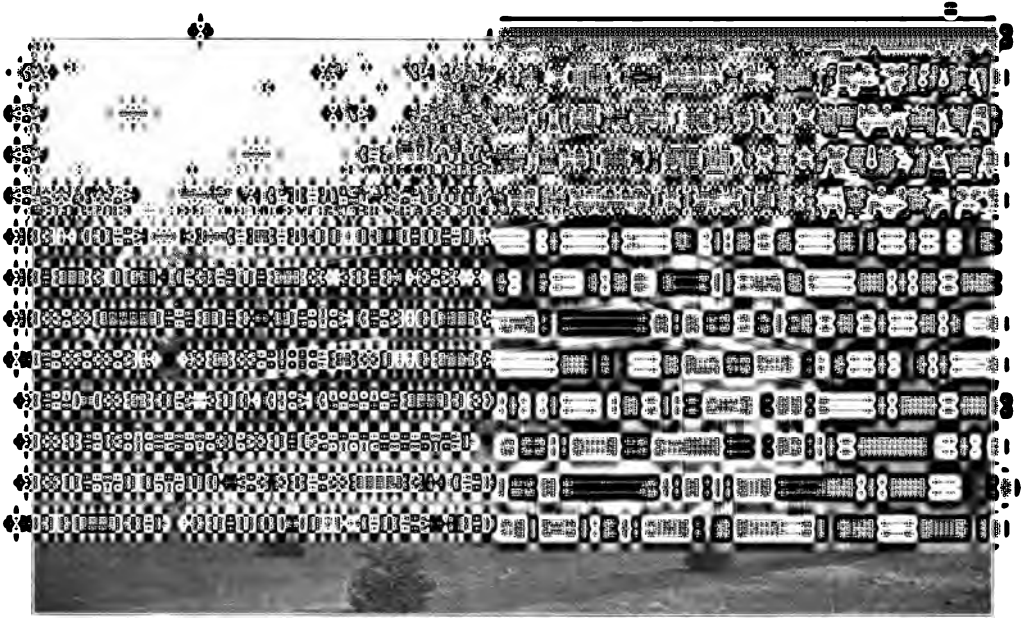
of the parlor mantel be put into the kitchen sink. Essentials, not fancy work, are to be considered.

The Site

The selection of a suitable site is one of the first considerations. To be sure it is quite probable that to the vast majority of home makers the opportunity for choice in the details of location and construction may not be given; but this paper is written from the standpoint of the freedom of choice in the belief that it is better to strive for ideal conditions than to omit them from life's program.

Where then shall the new house be put? On the hill or in the valley? In the city or in the country? The answer to these questions will vary according to the tastes of the different owners, but in each case certain questions should be very carefully considered in choosing the location of the house. The character of the soil; the natural slope of the land; the direction of the prevailing winds; the possibilities of drainage; the character of the surroundings; the kind of neighbors one is likely to have.

In most regions a southern or eastern exposure allows the best distribution of sunlight in the house. There may be the temptation in the crowded city to use the "made ground" before nature's agencies has had time to make it fit for human habitation; and, in the country, the site of the barn, regardless of the drainage may determine the location of the house on the basis of saving steps for the men of the family.



MODERN DEVELOPMENT OF A SWISS CHALET OF THE EIGHTEENTH CENTURY.

Joy Wheeler Dow, Architect.

A GOOD EXAMPLE OF A QUEEN-ANNE HOUSE.

The Outlook

Since so much of some people's time must of necessity be spent inside the house some real thought and care ought to be given to securing an outlook that shall yield to the occupants of the house as much of the beauty of the earth and air and sky as possible. A slight change in the position of even one window may bring to the dwellers for all time a picture of hill and dale with forest and stream that shall be a perennial source of pleasure.

Due consideration having been given to securing pure air, sunlight, dryness, and the various elements included in the term "agreeable surroundings," the form of construction and kind of materials are to be considered.

Style of House

Shall the new house be of wood, brick, or stone? Queen Ann, Gothic, or Old Colonial style? Here again much depends upon individual taste and the materials that can be obtained at least expense. Stone houses, for example, are practically debarred from some localities because of the expense of transportation which must be added to the cost of the stone; but in any case the construction must be adapted to the location. A stone house in a treeless, stoneless, prairie region, looks like an intruder in the landscape. It needs the hills and rocks for its setting. A low, rambling house, if it crown the brow of a hill, lends itself to the landscape much better than the high narrow one which gives somewhat the impression of a sign board. Again,

an Old Colonial house requires space for its proper setting. Adaptation and appropriateness are important elements in deciding the materials and construction of the new house.

HOUSE PLANNING

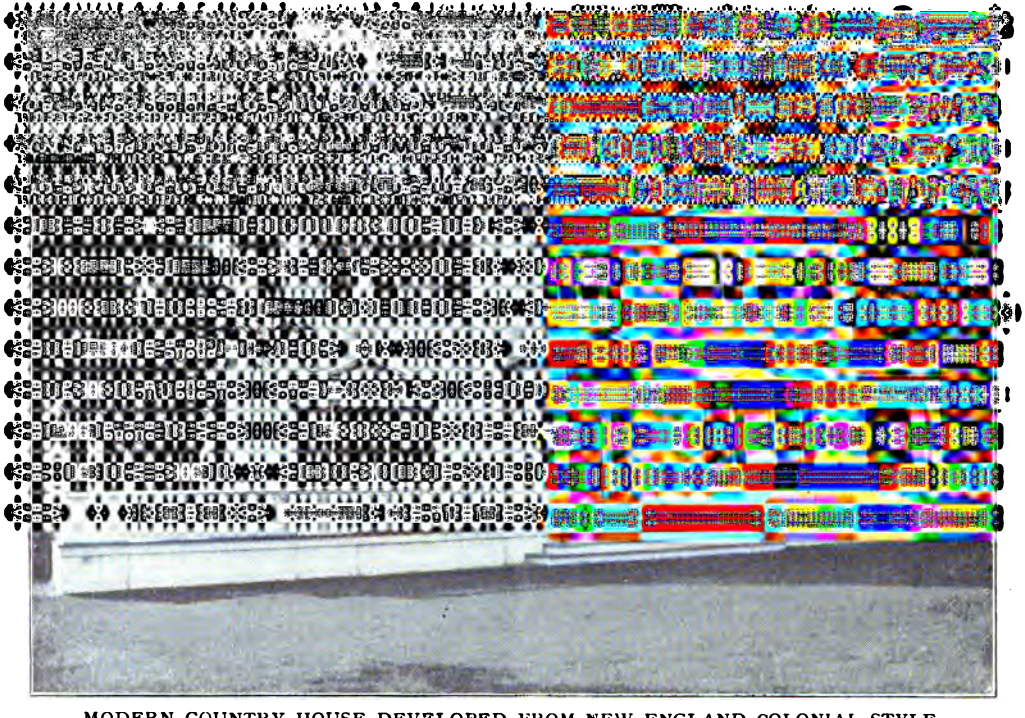
A Complex Problem

We are now to consider this subject in detail. The problems of domestic architecture are complex not simple. Its elements are numerous and varied. Ecclesiastical architecture has fewer difficulties to contend with than domestic. A church is built for a specific purpose, a dwelling house stands for a dozen interests, some of them apparently conflicting. It must be at the same time a workshop and a place of rest. In it provision must be made for the sick and the well, the young and the old, for sleeping, eating, and cooking, as well as for the entertainment of guests.

It requires skill of a high order in more ways than one to plan a successful house. A house plan is to be regarded as successful only when it meets the requirements for comfort and convenience of the particular family for which it is intended. It is evident then that house plans should not grow, like mushrooms, in a night but should be given ample time for development.

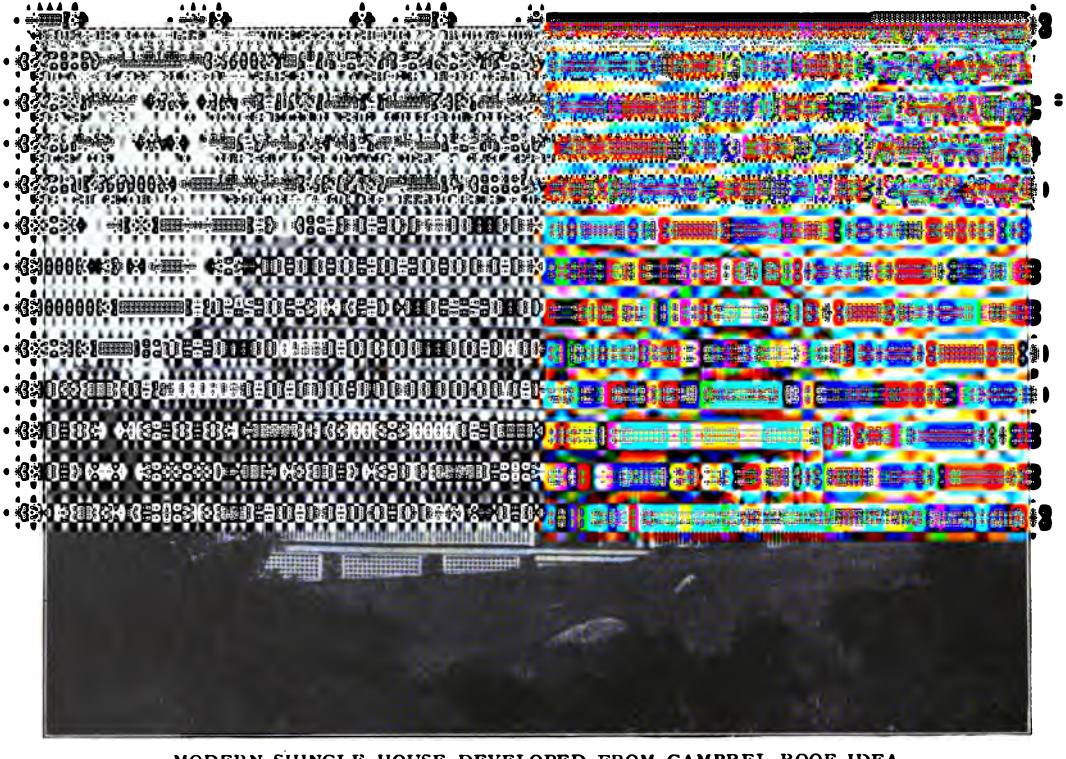
The Architect

The architect should be made familiar in so far as practicable with the personal preferences of the family in order that he may the better plan for their comfort.



MODERN COUNTRY HOUSE DEVELOPED FROM NEW ENGLAND COLONIAL STYLE

Frank Chouteau Brown, Architect, Boston



MODERN SHINGLE HOUSE DEVELOPED FROM GAMBREL ROOF IDEA

It is not for the architect to express the personality of the owner, but to help the home maker to do so. Six months or a year is not too long a period in which to consider the plans for the new house. In the meantime it is well for the family to collect as many concrete examples as possible of the things that seem to them desirable in the new home.

The sight of the real may often do away utterly with an ideal that had been cherished for sometime. Having collected and considered these various ideas it is well to formulate some method of procedure, to make some analysis of house plans, an outline, if you please, of essentials and non-essentials.

Division of Space

However much house plans may differ in details it is evident that the whole space enclosed by the four walls must serve at least two purposes; one part of it will serve as a place to rest, work, or sleep in; and another portion must serve as a means of communication. This fact serves as a basis for the division of the entire space into rooms and thoroughfares. This first division is of great importance. The comfort and convenience of many a house has been forever destroyed by the fact that the thoroughfares were improperly located, or in wrong proportion to the size of the house, and the cost of heating has been materially increased by a wrong distribution of floor space.

We all know of houses in which the distance from the front door to the kitchen is so great that the time

and energy used in answering the front door bell leaves little of either for anything else, and other houses where wide drafty halls and open stairways take the heat from the small rooms and leave the occupants shivering before the grate.

The manufacturer constructs his "plant" so as to save time and labor for his workmen. Ought not the same care to be given to the construction of his house?

The space and money expended in passage ways beyond that required for comfort and convenience adds to the expense in building and later in the care and furnishing without yielding an adequate equivalent. Both rooms and thoroughfares admit of classification. The rooms may be divided as those intended (1) for the use of the family, (2) for the use of the servants.

Yet another division may be made of the rooms. In every home there are rooms set apart for family use, for the entrance of the friend or stranger, and there are other rooms for the private use of the individual members of the family.

Thoroughfares

The thoroughfares, too, may be classified as those intended for the family or for the servants and the family ones may be intended for public or private use; the servants' thoroughfares may be private or service, that is, used by servants in performance of their duties.

We give, then, as most suggestive and helpful the "analysis of the house plan" outlined by Osborne in his little book on house planning:

- **The House**
  - **Rooms**
    - **Family.**
      - Public.
        - Reception Room (Pu.).
        - Parlor (Pu., Pi.).
        - Drawing Room (Pu., Pi.).
        - Library (Pu., Pi.).
        - Billiard Room (Pi.).
        - Picture Gallery (Pu.).
        - Dining Room (Pi., S.).
        - Verandas.
        - Etc.
      - Private.
        - Study (Pi.).
        - Boudoir (Pi.).
        - Bed Rooms (Pi.).
        - Dressing Rooms (Pi., S.).
        - Bath Rooms (Pi.).
        - Verandas.
        - Etc.
    - **Servants**
      - Service.
        - Kitchen (S., Sp.).
        - Pantries (S.).
        - Laundries (S.).
        - Dairies (S.)
        - Store Rooms (S.).
        - Etc.
      - Private.
        - Servants' Hall (S., Sp.).
        - " Bed Rooms (Sp.).
        - " Bath " (Sp.).
        - " Verandas.
  - **Thoroughfares.**
    - **Family.**
      - Public.
        - Principal Porches.
        - Vestibule.
        - Entrance Hall.
        - Inner Hall.
        - Etc.
      - Private.
        - Family Stair Hall.
        - Family Corridors.
        - Etc.
    - **Servants.**
      - Service.
        - Between Family and Service Rooms.
      - Private.
        - Bet. Servants' Rooms, or Servants' and Service Rooms.

NOTE.—Letters in brackets indicate the proper thoroughfares upon which the room should be found; where two thoroughfares are indicated the room may or should be upon both; Pu, public family; Pi., private family; S., service; Sp., servants' private thoroughfares.

It is to be hoped that the statement about the difficulties of house-planning will not discourage anyone

from undertaking it. Women especially should learn to express on paper the mental picture they have of the house that seems to them comfortable and convenient. At the same time they learn to understand and to think in the terms of the architect and so to interpret his plans. Very many disappointments about the "new house" are due to the fact that the housekeeper "did not understand from the plan that it was going to be that way." Some bedrooms are made with no desirable place in them for the bed because they were considered as rooms in the abstract without thinking of their particular use and the furniture which would be required.

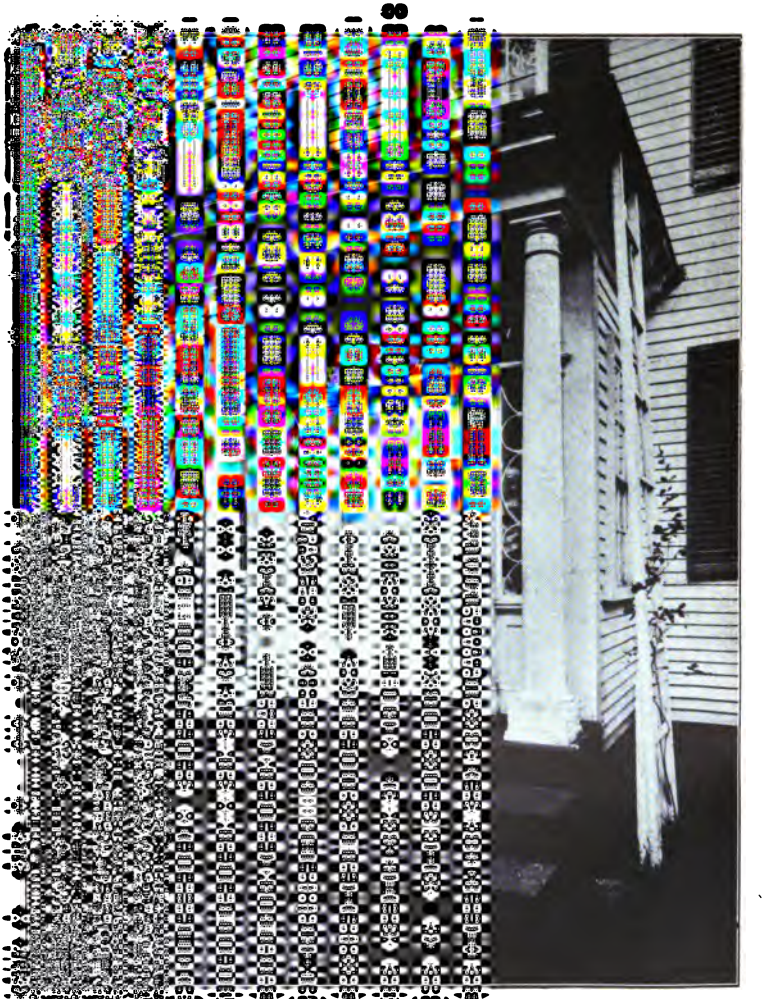
Use of Cross-Section Paper

House-planning if entered into in the right spirit, can furnish to the family quite as much interest and more profit than a game of cards. A good pencil, a ruler, an eraser, some cross-section paper and a problem are all that one needs to begin the game. The spaces in the paper, usually one-eighth inch, can stand for a foot and thus aid to accuracy and proportion of the several parts. Or the engineering paper in which the spaces are smaller may be used.

ENTRANCES

It is perhaps simpler to make the entrance the chief factor in the first planning, since it is such an important factor in all house plans. Quite unconsciously our impression of the house is greatly influenced by our

[illegible] ENTRANCE
Photograph by [illegible] Alexander Easton



[illegible] WALL, MASS.

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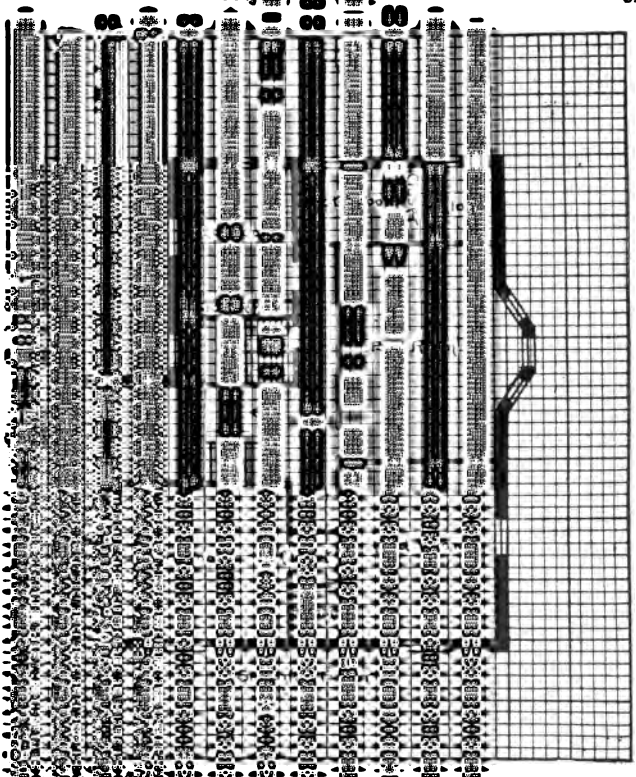


[illegible] Each Small [illegible] are entrances [illegible] owner's love of [illegible] because there

Essentials

What then are the essentials in a front entrance? First, it should be so placed as to leave no doubt that it is the principal entrance. To that end it should be easily accessible and have some distinctive character. It is a source of considerable profit and diversion to study the front entrances of the dwellings on a particular street to see the character or lack of it which they convey to the passer-by.

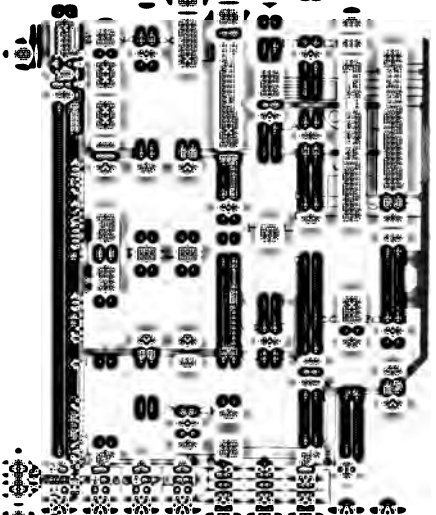
Simplest Entrance

Let us consider the different types of entrances. The first, simplest, and least desirable is that in which the caller steps directly from a stone or a plank into one of the principal rooms of the house.

There are many disadvantages about such an arrangement. Whatever of cold or heat or storm is on the outside is taken directly within to the living room. In winter the frequent admission of these blasts of cold air increases the expense of heating the house. It also means additional labor for the housekeeper because of the snow and dirt that are brought into the living room. The addition of even a small porch on the outside large enough to hold a mat on which the muddy boots can be wiped, and a roof over the door will add not only to the appearance of the house, but afford much protection to the front door.

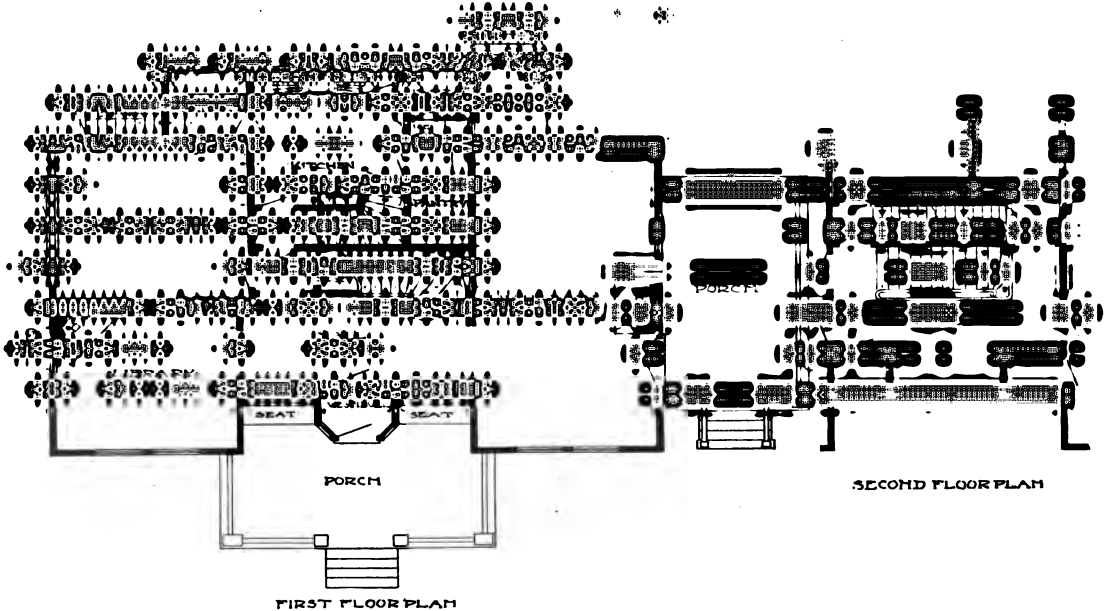
Porch and Reception Hall Entrance

Another form of entrance consists of porch and reception hall with the stairs leading from it. This form is sometimes used to economize space; that is, to make the hall serve the purpose of a reception room.

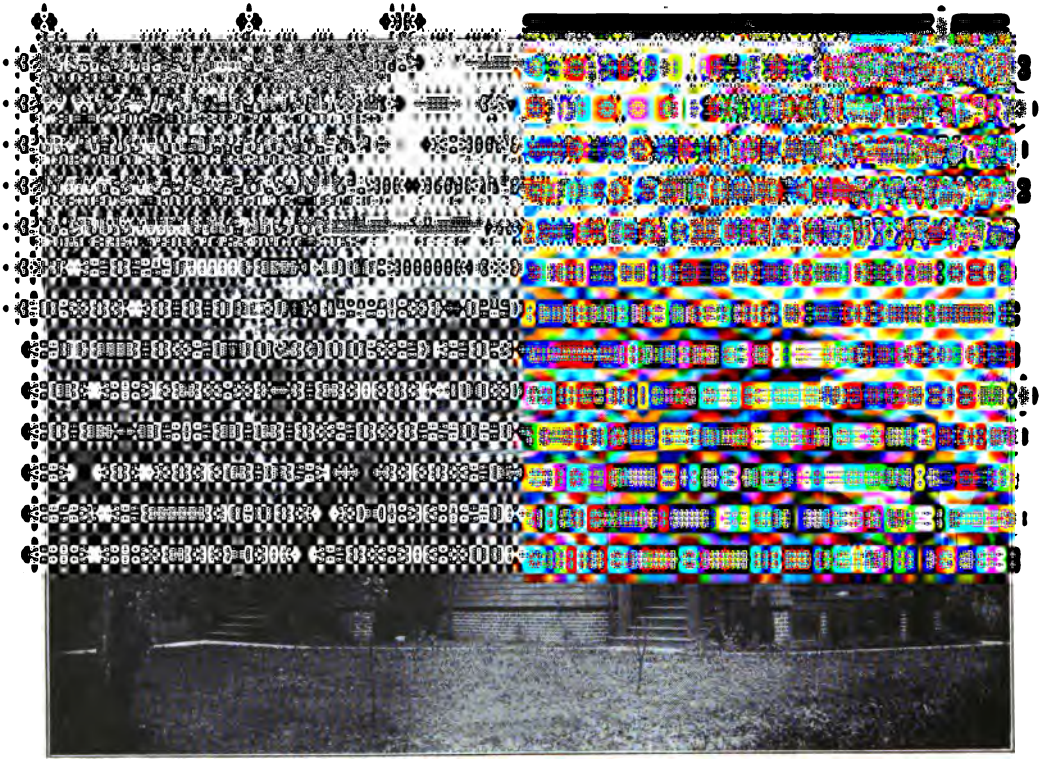


[illegible] to Avoid Drafts [illegible] Stairs.

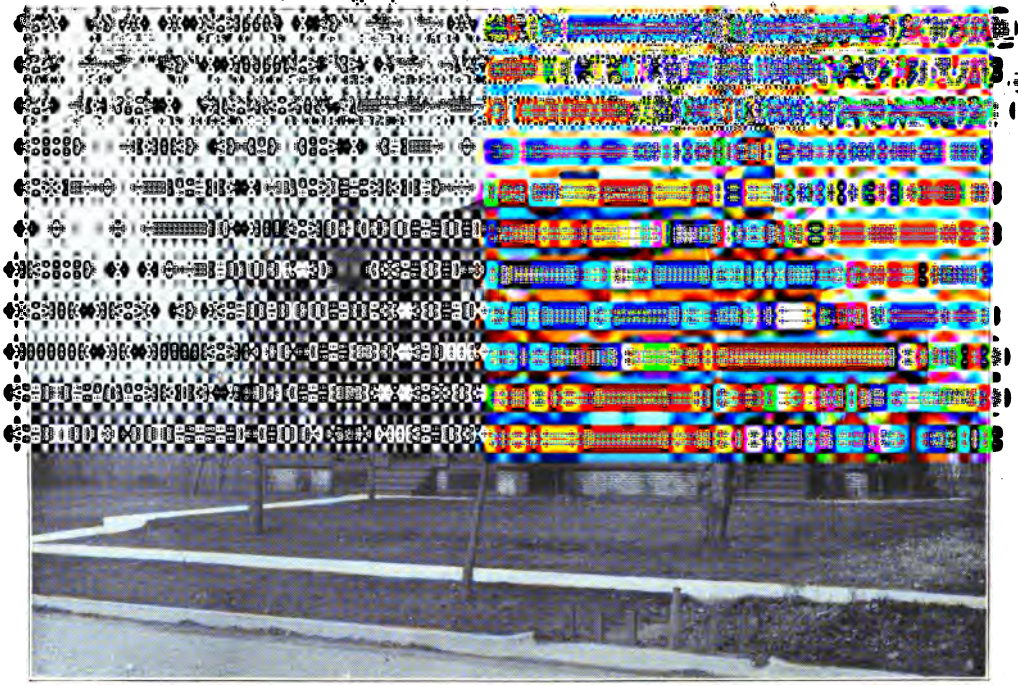
[illegible] activeness of [illegible] the relative [illegible] stairway or the [illegible] proper pre- [illegible] room. This [illegible] of part of the [illegible] sened by the [illegible] room is be- [illegible] inch in the draw-



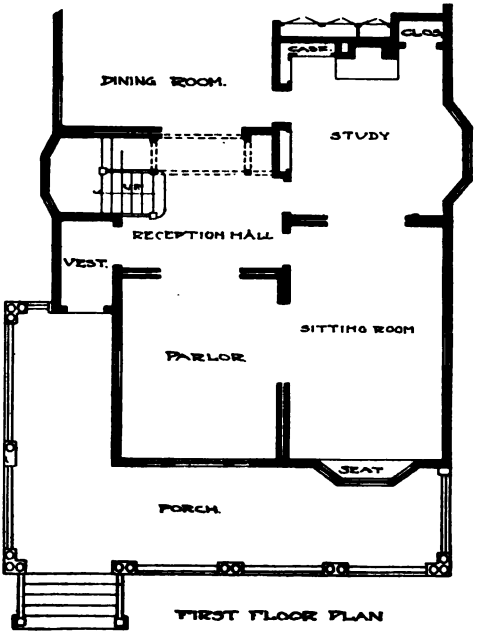
PLAN No. 2. One Type of Central Hall. Large Porch on the East. House Faces South. Notice Position of Ice Box. An Attractive Upstairs Hall. Scale $\frac{1}{16}$ inch = 1 foot.



PHOTOGRAPH OF THE HOUSE GIVEN AS PLAN No. 2.
View from the Southeast. Cost about $5,000 to $5,500, Depending Upon Finish and Local Conditions.



ANOTHER VIEW OF THE EXTERIOR OF HOUSE NO. 2.



PLAN No. 3. Shielded Entrance at North Side. House Facing West.

yond the opening into the hall and also removed from the staircase.

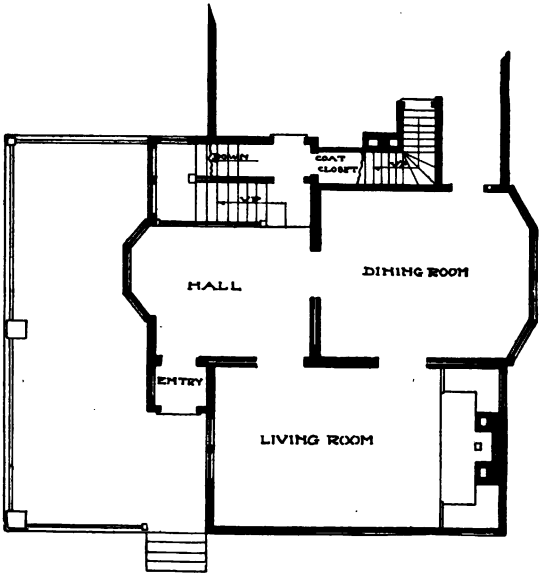
Porch and Vestibule Entrance

In yet another type of house the entrance consists of three parts, (1) porch, (2) vestibule, (3) entrance hall. This entrance may be placed in the middle of the house with rooms on either side. (See Plan No. 2.) Or, if there be a narrow lot or a west exposure, in which case it is desirable to shield the front en-

Side Porch Entrance

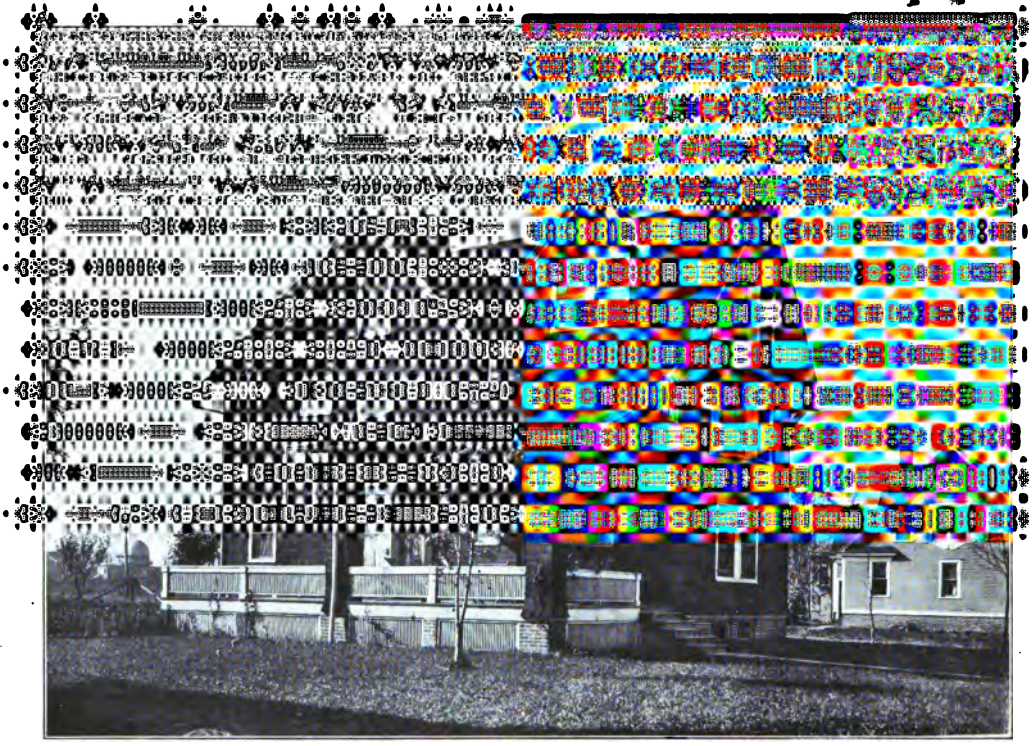
trance, it may begin with a porch which is on the front and extends to the side, opening into a vestibule which leads into a hall. (See Plan No. 3.)

In this plan, No. 3, the porch shuts some of the sun from the sitting room which has also a southern exposure. The entrance is shielded both by the porch and by the projecting parlor.



FIRST FLOOR PLAN

PLAN No. 4. Northern Entrance Protected by Porch and Projecting Room. West Dining Room Not so Desirable. Fine Porch on the East.



PHOTOGRAPH OF HOUSE SHOWN IN PLAN No. 4.
Taken from the Northeast. Cost from $4,500 to $5,000.

Another type of entrance at the side is shown in Plan No. 4. There is no porch on the front here and the reception hall with its bay window is quite an attractive room.

Vestibule Desirable

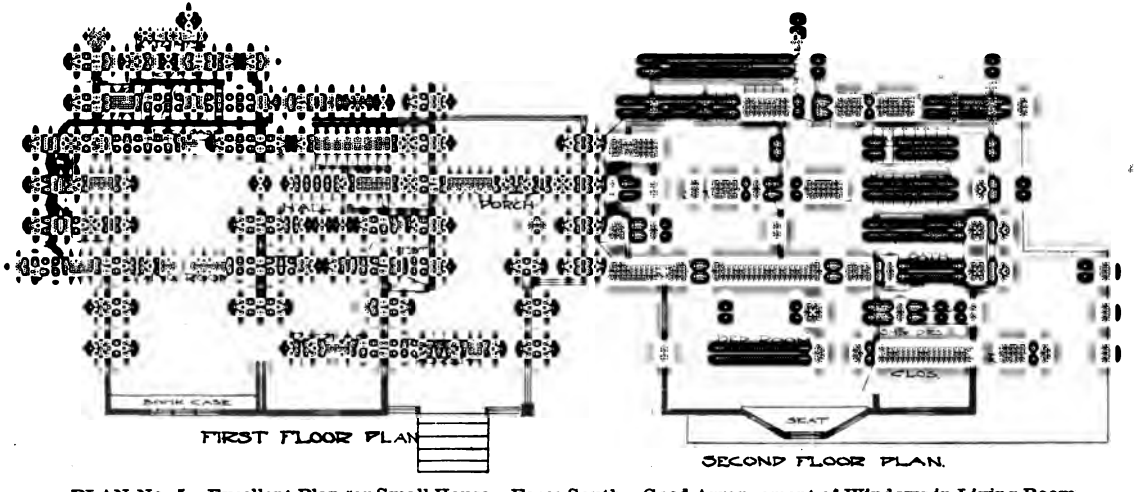
In any case the vestibule proves a most desirable addition. It makes the transition from the outside to the inside more gradual, prevents the direct passage of the cold air into the body of the house, provides a place for wraps, overshoes, umbrellas, and contributes to the comfort of both hostess and caller.

Small Hall

Plan No. 5. This illustration shows a very convenient and comfortable arrangement of floor space in a rather small house. In this plan a small amount of space used as hall gives convenient access to the reception room, living room, kitchen and stairs. The reception room is large enough for the formal caller, while the living room is a very attractive and well lighted room. The second story shows a good arrangement.

Side Entrance

No mention has been made of the porte-cochere or side entrance, which is so desirable in country or suburban houses. The connection is sometimes made by a side porch which connects with the front one and the guests pass in at the front door. Often this is not desirable as it results sometimes in bringing the guests into the midst of a company when no opportunity has been given them to put aside their wraps. It is better if the side porch can connect



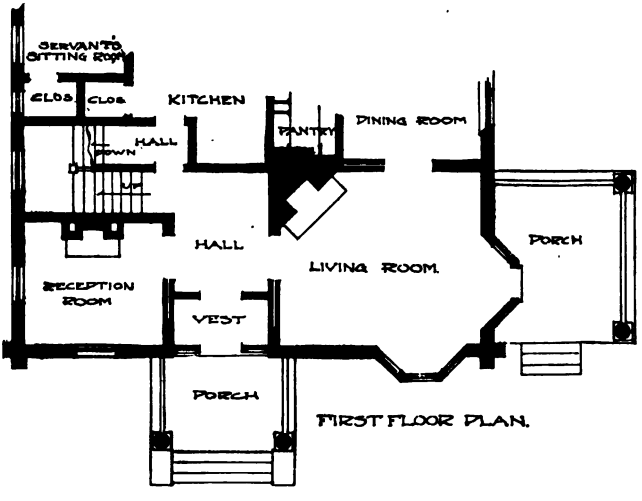
PLAN No. 5. Excellent Plan for Small House. Faces South. Good Arrangement of Windows in Living Room. Library and Living Room Combined. Study Upstairs. Scale $\frac{1}{16}$ inch=1 foot.

VIEW OF HOUSE No. 5 FROM THE SOUTHEAST.
Cost about $3,500 to $4,000.

directly with a side hall and thus admit the guests to the stairs without passing among the company.

Position of Porches

It is well to remember what seems to be a rather recent development in house-planning; viz.: that the best porch for family use is not necessarily the front porch. A southerly exposure, which for many reasons is desirable, does not give a pleasant afternoon front porch; but if a porch be placed on the east side, the family may enjoy shade and freedom from the publicity of the front entrance at the same time. (See Plan No. 2.) A good porch, someone has said, "is the most



PLAN No. 6. Family Porch on the East of the Living Room. Only One Staircase, but Well Placed to Serve Double Purpose. Servants' Sitting Room.

valuable room in the house." It is certainly a bit of space that yields as much comfort as any room, now that we have learned to have roomy, comfortable porches and to live on them. Plan No. 6 shows a small entrance porch with a comfortable porch for the family on the east connected with the living room.

THE FARM HOUSE

Conditions on the Farm

The usual distribution of the first floor space into kitchen, dining room, living room, and parlor or reception room with hall and vestibule which has been suggested in these plans has been worked out in many attractive ways for the city or village house, but is not so well developed for the average farm house. The necessities for farm dwellings differ somewhat from town houses. For example, there is little formal calling on the farm, but frequent short calls that have more or less of a business character. It is not desirable to bring these strangers into the privacy of the family life and apparently not suitable to receive them in a formal reception room. It seems as if a reception hall with desk, fireplace and one or two easy chairs, with the daily paper or new magazine might serve a useful purpose here.

Men's Sitting Room

Another room that is much needed in some farm houses is a sitting room for the men who work for the family. It should be on the first floor, easily accessible from the side or rear of the house, and have

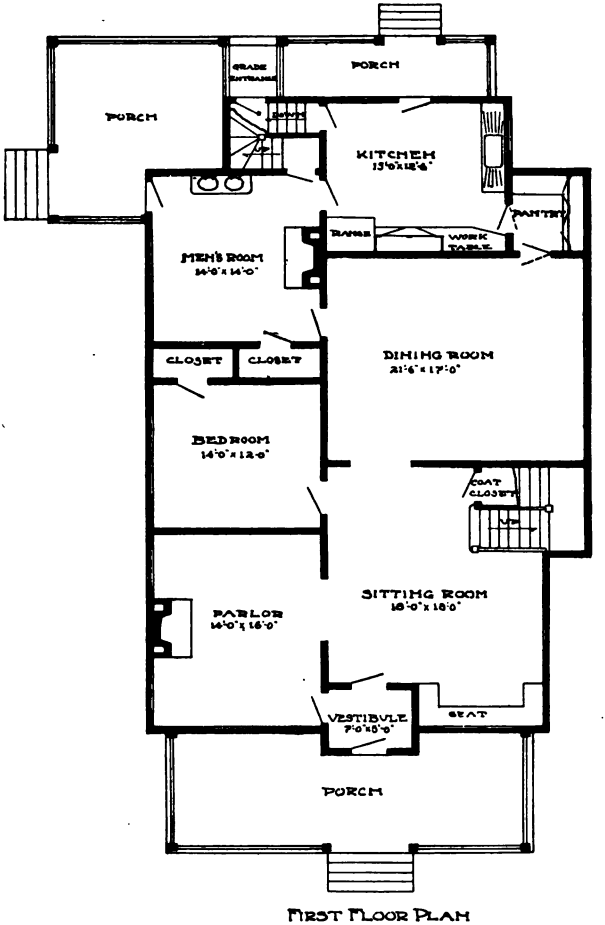
in it or near it a lavatory in order that the workers may be able to make themselves clean and comfortable before they pass to the dining room.

Large Dining Room

Another requirement of the average farm house is a large dining room to accommodate the large number of men that are needed on threshing and wood sawing days. It is quite desirable also that the dining room shall have an outside door, that it may not be necessary for workmen to pass through the kitchen and pantries or sitting room to reach the dining room.

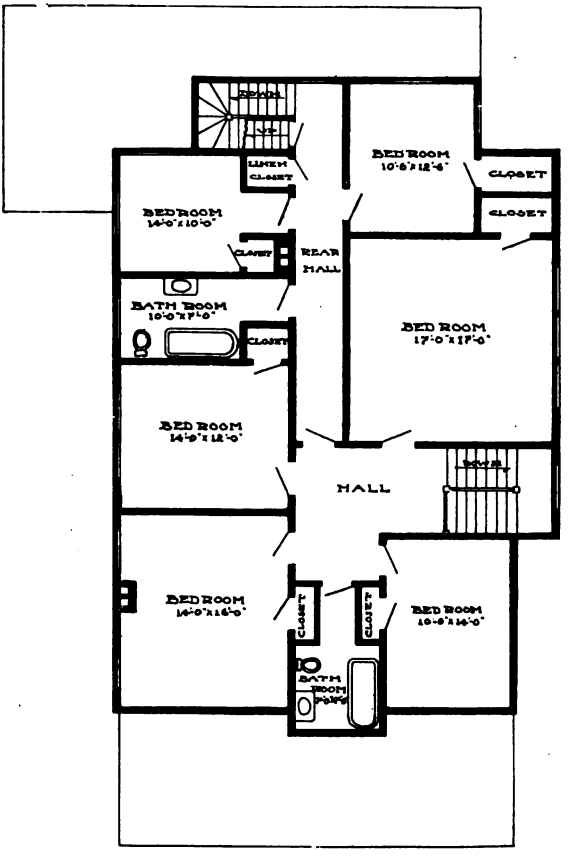
Plan No. 7, shows a plan for a farm house that has many desirable qualities. The men's sitting room is well placed. The bedrooms for the "help" are separated from the family bedrooms as is also the bathroom. A bedroom downstairs is often a great convenience, particularly if the mother does her own work and has little children. A great lack in most farm houses is water brought into the kitchen. It seems to be easy enough to have the wind pump and the pipes to carry the water into the barn, but "so much trouble" to put it into the kitchen. In no place is the need greater for water in the kitchen and for a good bath room than on the farm.

The plan for a farm house is capable of many variations. The outline of the parlor may be made less rectangular by a change in the windows. If the men's room is not needed by the "help" as a sitting room all the year it will make a good children's room.



FIRST FLOOR PLAN

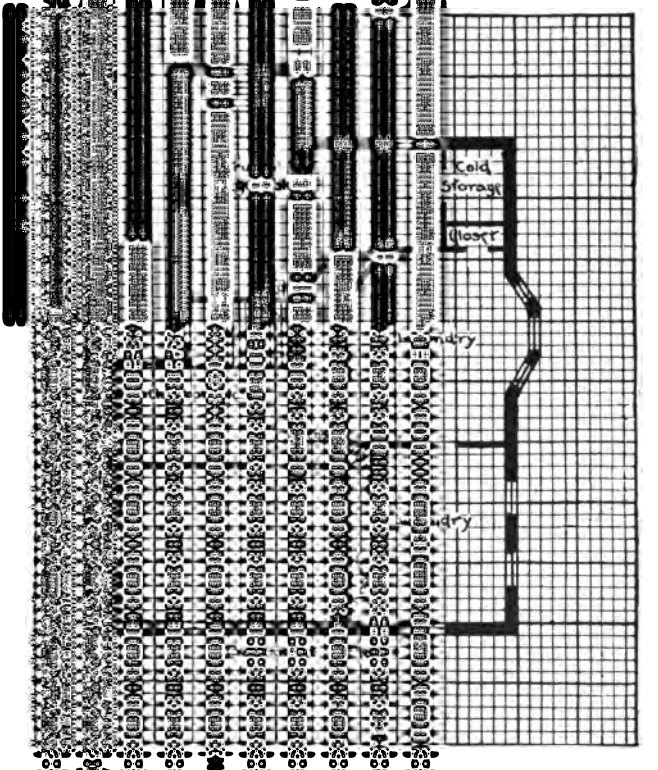
PLAN No. 7. Farm House. Facing South. Family Bedroom and "Help" Sitting Room.



SECOND FLOOR PLAN

PLAN No. 7. Farm House. Separation of Family and Servants Rooms. Good Arrangement of Rear Stairs.

[illegible] be willing to put [illegible] space given to the [illegible] sewing room. The



[illegible] Having Bath Room

[illegible] possible to [illegible] floor.

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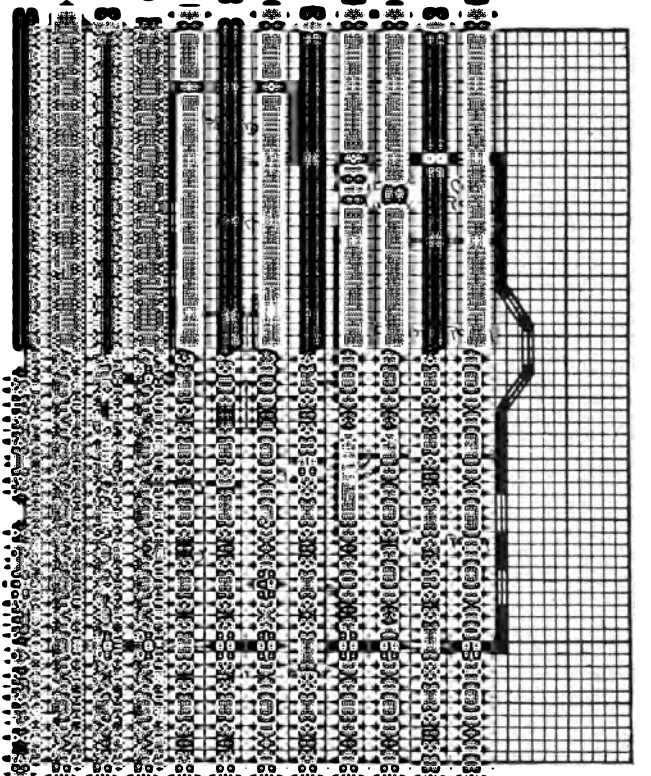


[illegible] Dining Room, and [illegible] Floor Plan).

the men's room. The essentials in the kitchen are well located.

Farmer's Plan for a Farm House

Plan No. 8 is a student's plan for a farm house. It shows the use of cross-section paper in making house plans, each small square representing a foot. The maker of this plan is a farmer's son. It seemed to him desirable to have the place for the men to clean up in the basement. The cold storage room has in it a place for the storage of ice for summer use. The stairs from the basement lead directly into the rear hall, which gives easy access to kitchen and dining room. A bay window adds attractiveness to the dining room and a fire-place gives cheer in the living room. If it were desirable the library might serve as the office and reception room, or the room could be used as a downstairs bedroom if one were needed.

If the house be heated by a furnace, a hall is very desirable; if it be not so heated a hall seems a cold, unattractive place in winter.

These two types of house plans seem fairly well suited to the needs of farm life.

ROOMS

The Hall

The entrances and halls considered indicate a few of the ways in which the thoroughfares of the lower floor may be treated in the distribution of the floor space. The width of the hall will depend upon the size of the house, the location of the hall and the pur-

pose it is intended to serve. Seven and one-half or eight feet is a minimum width for a central hall. The lighting of it too is an important factor. It is usually accomplished by making a part of the entrance door of glass, by transom and by glass at the sides of the door. Artistic and pleasing effects are often thus produced.

It may be well now to consider some of the characteristics of the rooms usually found on the first floor. If one classifies the rooms of a house as rooms to live in, to work in, and to sleep in, those rooms which belong to the first two classes will be found most often on the first floor.

Proportion

It has been said that proportion is the good breeding of architecture and it is one element never to be forgotten in house construction or decoration. The thoroughfares are to have their due proportion of space, no more; no less; the separate rooms are to have their proportion of space, determined by the purposes which they are to serve. For example, a large parlor or reception room and a small living room would seem to indicate that the comfort of the family was to be sacrificed to display for the formal caller. Each room is to be considered not only in reference to its specified purpose but in its relation to the other rooms, and to the thoroughfares.

The Parlor. Much is said in these days about "the passing of the parlor," and great emphasis is put upon

the living room. A closer study would seem to indicate that it was not the room that was passing away, but that its purpose was given a new interpretation.

The term parlor to many people suggests a square room with a few pieces of hair cloth furniture set at regular distances about the wall, a "center table" in the center of the room and on it a glass case containing wax flowers and an album; the walls decorated with the family portraits, and the whole having a generally unlivable air and so quite properly reserved for funerals and weddings.

Reception Room

Happily such parlors are "passing" and some people, because of the ridicule attached to them, are almost afraid to own that they possess a parlor. The fact remains, however, that that ridiculed parlor stood for two things which every well-regulated home should have,—a room that is kept in order, and a place where the formal caller may be received without intruding into the privacy of the family life. The rooms in which the family live and work are not always and should not be expected to be ready for the reception of the passing stranger. So, for the comfort of all it is better that there should be a room near the principal entrance and not far from the front stairs for the reception room or parlor. To avoid the "stiffness" sometimes associated with a square room its outline may be changed by the introduction of a bay window or a grate. The haircloth furniture and family portraits also may be

eliminated. It is desirable too that this room have more than one door of exit. In case a company is to be entertained in the house "circulation" is much more easily accomplished if one may pass from the parlor to either the hall or library or sitting room.

Living Room

The Living Room. In this room the family life is to center. Provision is to be made in it for the needs of the various members. It should then have, if possible, the best view the situation affords, plenty of sunlight, and a view of the setting sun is desirable. Its outline too should be distinctly varied either by windows or fire-place so as to make it possible for groups to gather. Cupboards for toys, fancy work, or a few books, and window seats which open—all help to meet the varying needs of family life.

This room too should open on the principal thoroughfare. It is desirable that it be the largest room of the house, oblong rather than square; a room eighteen by thirty or twenty by thirty feet makes a good-sized living room.

The Dining Room. This is one of the most important rooms in the house. It is possibly the one place where all the family gather daily. Cheer and brightness are associated with it and its construction should aid to both. First, as to size: It should be wide enough to allow the easy passage about it that is required in service. A minimum of eleven by thirteen and one-half feet and a maximum of seventeen by twenty-two

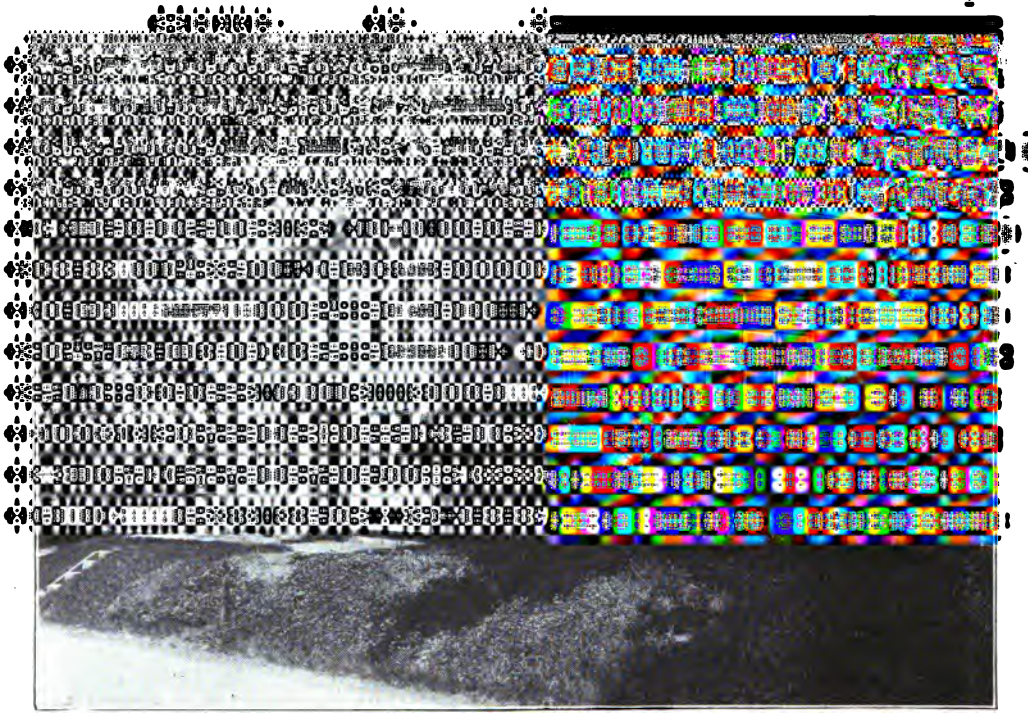
feet seem to meet the requirements of ordinary houses. A sideboard or china closet is almost an essential. It is desirable to have it built in in a recess near the pantry door. If there be room for it a fireplace is a desirable addition but its location should be carefully considered. It is better at the end than at the side, as the heat of the fire may make the backs of the people at table uncomfortable.

Lighting of the Dining Room

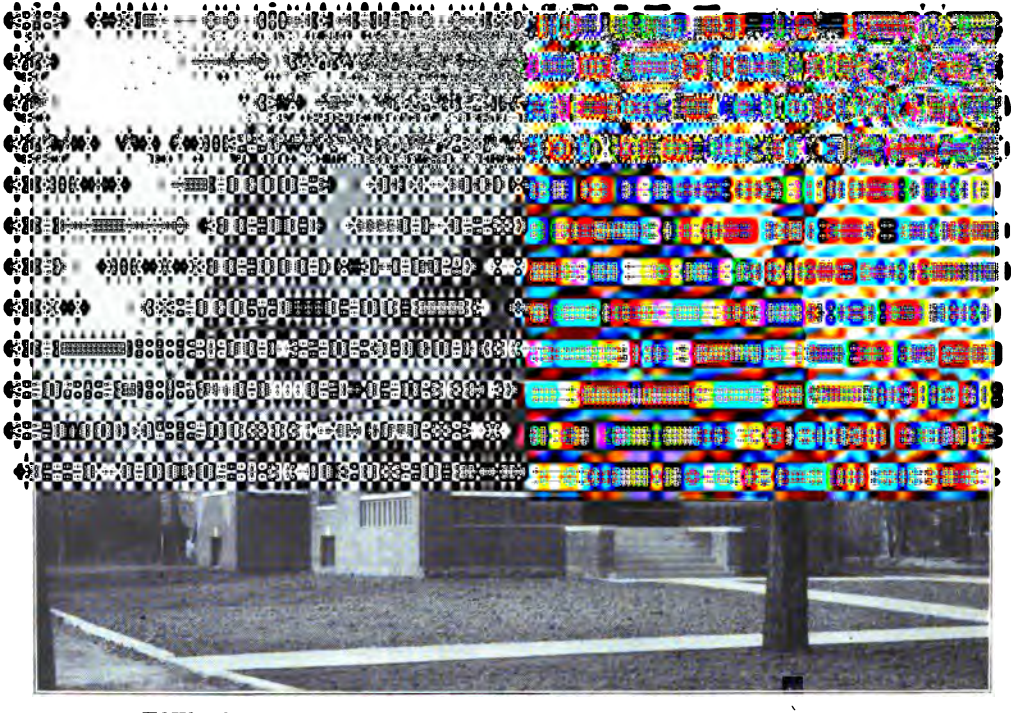
The lighting is another important consideration. If that can come from the end too, it is less likely to shine in the eyes of the people at table, or to cast a shadow over those on the other side of the table. It should not, however, be placed directly in the middle of the end, but distributed by being put near the corners of the room. A secondary light may be added by smaller or irregular windows at the side. A western exposure is not preferable for a dining room. It makes the room a rather cheerless one on a winter's morning, and in the summer, by the time the family gather for the evening meal, the rays of the setting sun are likely to interfere with their comfort. So a southerly or easterly aspect is much to be preferred.

The "Dinner Route"

The communication with the kitchen should be easy, not direct, but through a small pantry. By this means the odors from the kitchen are avoided, and the two walls shut from the dining room the noise in the kitchen. The doors in the pantry should not be directly opposite, lest they afford a direct view into the kitchen



MODERN PLASTERED HOUSE
Frank Chouteau Brown, Architect



HOUSE SHOWING COMBINATION OF BRICK AND WOOD CONSTRUCTION.

In Some Localities Such Construction is but Little More Expensive Than All Wood.

White and Temple, Architects.

from the dining room. It is quite evident also that this passage from the kitchen to the dining room, called by some the "dinner route," should be distinct and separate from the family thoroughfares.

The question of the communication between the dining room and the other rooms of the house beside the kitchen is an open one. In a small house where the only rooms that can be open to guests are the parlor and dining room, it seems almost necessary to have direct communication between them. On the other hand because of the close connection of this room with the service rooms and the consequent necessity, for several hours of the day, for complete separation it is desirable not to have this direct communication.

Sliding Doors

Perhaps in this connection a mild protest may be entered against a too generous use of sliding doors between the parlor, library, living room and dining room. They may prove useful when one wishes to "open up" the house for a large company, but for daily living they certainly detract from the privacy and singleness of use for which the separate rooms were planned. In feudal times the hall was the place where the people lived, ate, worked, and slept. The introduction of separate rooms for sleeping and eating were regarded as improvements. The introduction of a distinct passage way was a still further improvement. A too generous use of sliding doors seems to convert the floor space into a large hall. Sounds and odors

then penetrate to all parts of the house. The reader in the library is apt to be disturbed by the chatting in the parlor. The odors from the dining room are wafted into the living room. It seems much more desirable to have a hall serve as a means of communication and the rooms allowed to fulfill their particular function.

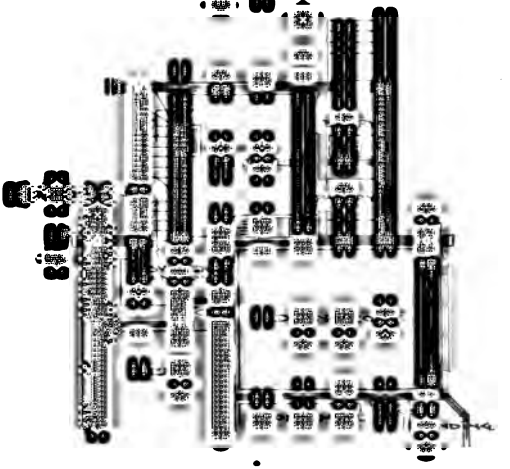
Sitting Room or Study

The Library. This term may mean a study chiefly for some one member of the family or it may be a kind of sitting room in which most of the books of the family are kept. If it is the former, the privacy and quiet which the worker seeks is often more easily obtained on the second floor.

The Kitchen. There yet remains for consideration that all important room, the kitchen; out of which issues so much that makes or mars the health and comfort of the family. A visit to the kitchen of the Deanery of Durham Cathedral helped the author to realize as never before how the purposes of the kitchen had changed in the centuries. That was an octagonal room with eight fireplaces and a stone floor. The guides explained that perhaps only two or three of the fireplaces would be used in the preparation of the daily food; that in the others were hung the quarters of beef or the pork destined for future use and preserved by the smoke which was kept beneath them.

Use of the Kitchen

The modern kitchen is not supposed to be either a store room, a laundry, or a sitting room, but it is a



ROOM

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Size

small kitchen and a large pantry with provision for doing the pastry work and much of the preparation of the food other than the cooking. Others prefer a large kitchen with a space quite removed from the range for this preparation. If the woman does her own work the first plan has much to commend it, and the amount of travel is not greatly increased if the working pantry be well placed.

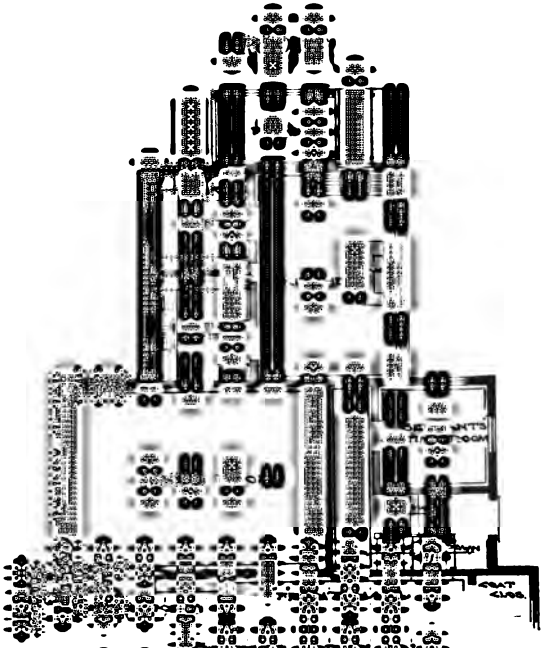
Closets

However much opinions differ as to the size of the kitchen, all women appreciate the value of closets and cupboards. It may be desirable for the cook in hotel kitchens to have his utensils hung on the walls over his work table. His interest does not lie in making as little work at possible for those who are to wash the soiled utensils and keep the room in good order. He wishes everything at hand that he may work *quickly*. In the average home the woman who cooks also cleans and it is to her interest to have as few things as possible exposed to the dust and steam of the kitchen. Utensils do not need to be exposed to be easily accessible and the care of them is greatly lessened if cupboards are abundant and roomy.

The Ice Box

The location of the ice-box is a fruitful source of annoyance in many houses. It should be so placed that it can be filled from the back porch and thus avoid the necessity of having the iceman's boots and dripping ice leave their marks in the kitchen.

See ice-box in Plan No. 2.



[illegible] LAUNDRY WITH ABRICADORIES.
[illegible] Sewing Pantry.

Closets

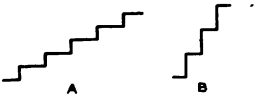
[illegible] to emphasize [illegible] by plenty of [illegible] kitchen uses. [illegible] piece of fur- [illegible] rubbers. A [illegible] is most desir- [illegible] to their use in

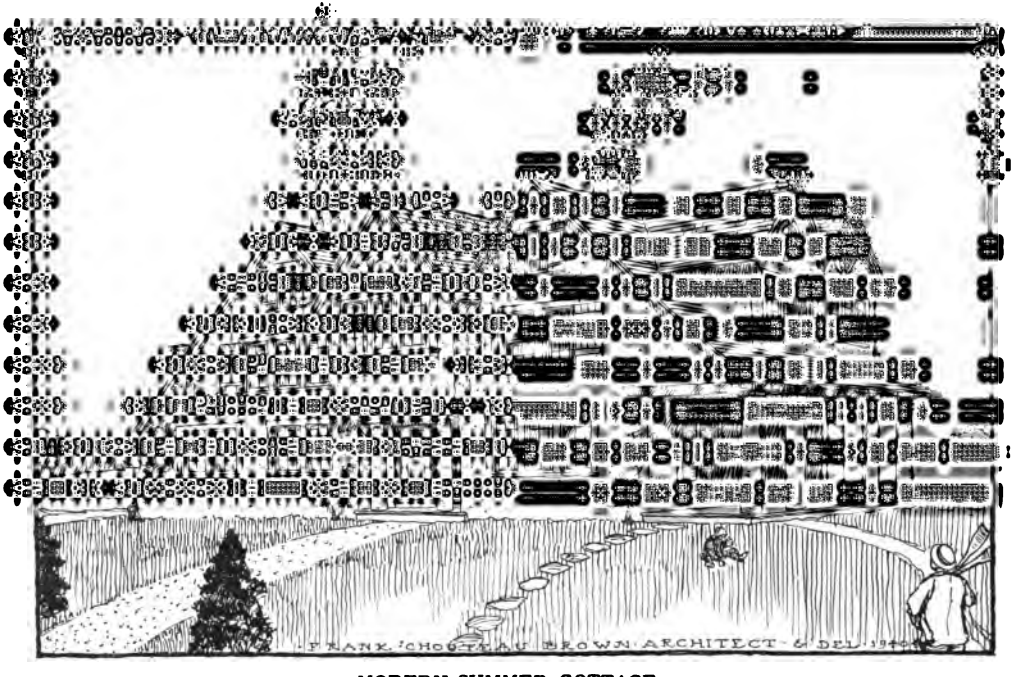
We have come by a somewhat circuitous route to the second floor plan. Just at this point is where the real fun in house planning begins, when one begins to devise a means of getting to the second floor. It is said that most women plan houses without putting in any stairs, and then wonder what the architect means by the "well hole," since they understood that the "water supply was to be brought from the outside."

STAIRS

Relation of Tread to Riser

It may be well to face the difficulties squarely and to decide just what is to be expected of a stairs. First: That it shall afford an easy means of transition from the first to the second floor. The ladder of the log cabin failed at the point of ease. The winding stair is likely to have the same defect. Wherein then lies the secret of ease in stairs? The architect answers in the relation of riser to tread. A stairs in which the riser and tread bear the relation shown in figure *B*, gives one somewhat the feeling of attempting to lift himself bodily into the air. A stairs in which the tread is about double the riser, *A*, is a much more comfortable one. Authorities seem to agree that when twice the height of the riser added to once the tread equals twenty-four inches the stair will be comfortable; that means a riser of seven inches and a tread of ten.





MODERN SUMMER COTTAGE

Two times seven plus ten equal fourteen plus ten equals twenty-four.

Well Hole

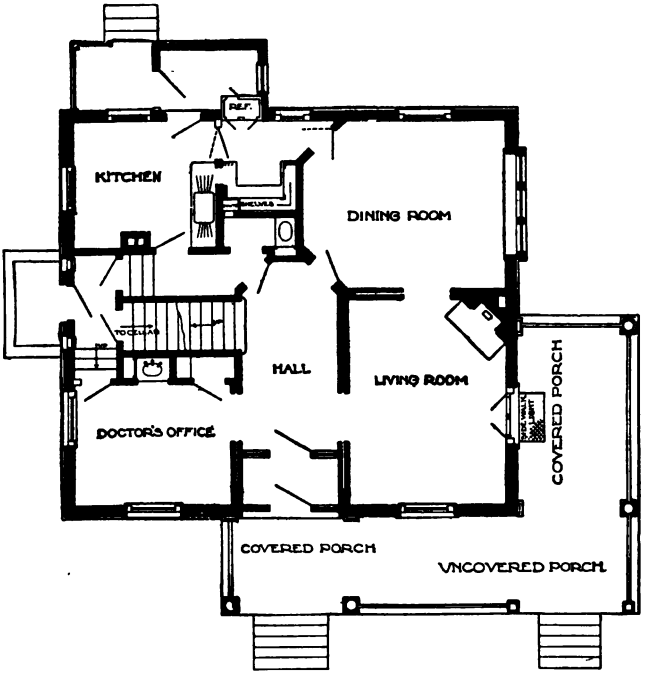
Second: It is evident that in going up stairs attention must be given to one's head as well as to one's feet, hence the necessity for the "well" or space between the floors.

Again, the stairs must be of sufficient width to allow easy passage. They should not be less than three feet and six inches, while four feet is a better width. The rear staircases should be wide enough to carry up furniture and trunks, and so save the front staircases. If absolutely necessary an eight inch riser may be used in the rear stairs. Into what shall the upper stairs lead? This is an important question. The answer given by some houses would be into a narrow, box like passage way; by others, into a room. Comparatively few people seem to understand that their efforts regarding attractive hall space ought not to be limited to the first floor. It is quite as desirable to have the stairs end well.

Plans No. 2 and No. 5 show attractive hall space on the second floor.

Front and Back Stair

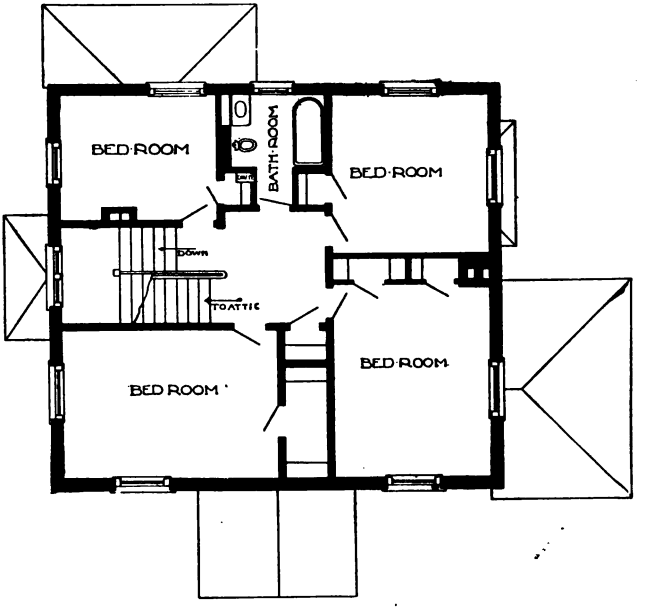
Before leaving the subject of stairs attention should be called to the various kinds of stairs in the house plans already considered. It is easy to appreciate the value of a front and back stairway as illustrated in house plans Nos. 2, 4, and 7; but in small houses it sometimes is desirable to put both the space and money



PLAN No. 9. An Excellent Arrangement of Rooms in a House Nearly Square in Plan. Compact Stairway. Side Entrance for Doctor's Patients. Convenient Kitchen, Pantry and Refrigerator. Note Sidewalk Light in the Covered Porch to Admit Light to the Cellar.

required for the making of the second pair of stairs to some other use. In such cases one may use either a "combination stairway," as shown in house plan No. 1, or locate the one stairway in such a place that it will be easily accessible from the front or rear of the

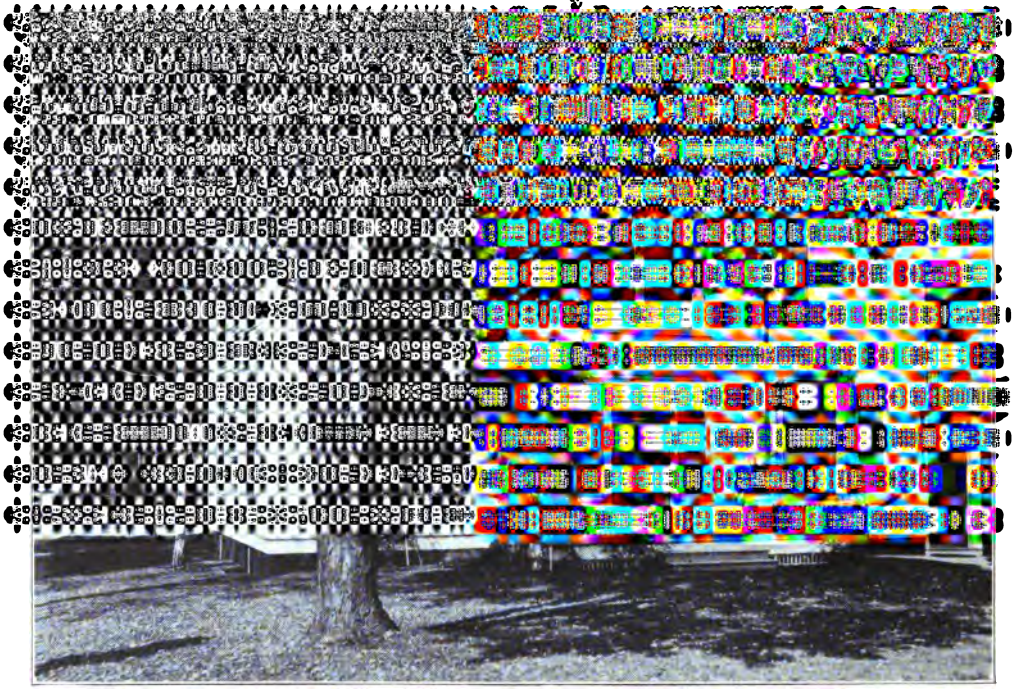
Combination Stairway



PLAN No. 9. Second Floor. Good Closet Room. Clothes Chute in the Bath Room. Scale $\frac{1}{16}$ inch=1 foot.
Messrs. White and Temple, Architects.

house. House plan No. 6 is a good example of that kind of a stairway. It is easily accessible from the front hall and yet so placed that one could pass up stairs from the kitchen without being noticed by any person in the reception room.

The combination stairway as shown in Figure 1, gives the privacy and separation on the first floor and saves space on the second floor.



THE REAR OF THE HOUSE SHOULD BE ATTRACTIVE.
Shows the Beginning of a Vine Covered Porch.

SECOND FLOOR PLAN

The division of floor space here into rooms and thoroughfares should receive careful attention. The rooms are likely to be used for bedrooms; possibly the family sitting room may be here. If so it should be near the front stairs, and the bath room should be accessible but somewhat removed from the front. It is very desirable to separate the bath room and the water closet.

Placing of Furniture

The surest way to be certain that the bedrooms have wall space for the furniture one expects to place in a bedroom is by representing these various articles of furniture by bits of paper at the same scale as the plan, and placing them about the room. Care should be taken about the position of the door that it be not so placed as to expose the bed whenever it is open. Light and air should be obtained by windows on two sides if possible, or by use of transoms. Ample provision should be made for closet space, at least one in each bedroom; one in the hall for the weekly supply of linen, and a store room for the bed coverings.

APARTMENTS

Nothing yet has been said about apartments or flats in which all the rooms are on one floor. The building of apartments is increasing rapidly in the large cities where land is expensive, because rents can be less for the reason that not so much must be charged for the ground rent. When hot water, heat, and janitor ser-

vice are furnished, the complications of housekeeping are lessened and as there are no stairs to climb, energy is saved in the daily routine. In the planning of apartments the most difficult problem is to obtain sufficient light and air—especially sunlight. Many of the rooms in a block of houses must, of necessity, be dark or only partially lighted—an unpleasant and unhygienic condition.

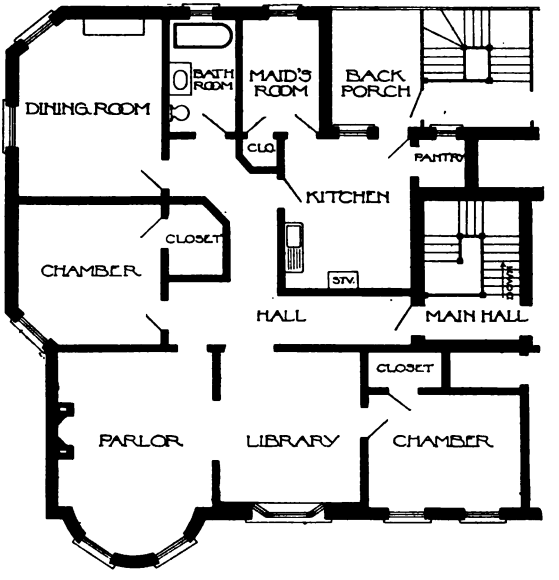
Many apartments are planned with a long, dark hall. The accompanying illustration shows an apartment in which such a hall is not present. The conveniences of a well-planned apartment are not to be gainsaid. The disadvantages are lack of privacy, an inability to have out-of-doors space, and lack of sunlight. These disadvantages are most objectionable when there are children in the family.

Essentials in House Planning

So much for the planning of the house. Whatever the style selected, the requirements of good building are great leading lines, good proportion, clear detail, and appropriate ornament. If the owner remembers this and that the structure must be adapted to location, environment, and purpose, with comfort and convenience, he is likely to have a house that is pleasing to the eye as well as convenient.

Originality

To some people originality and individuality in house planning consist in introducing an unusual window here, a strange cornice or ornament there, and an odd door at another place. As a result of this "freakishness" one finds a window which looks like the port hole



PLAN OF A FLAT WITHOUT A LONG, DARK HALL. GOOD CLOSET ROOM.

of a vessel, a gingerbread cornice and a heavy castle door all heaped together in a small house, making it look as if it had been made from an architectural scrap bag.

This quotation from "Decoration of Houses," by Codman and Wharton is one that ought to be frequently recalled. The author is discussing originality in architecture: "What is originality in art? Perhaps it is easier to define what it is *not;* and this may be

done by saying that it is never a wilful rejection of what have been accepted as the necessary laws of the various forms of art. Thus, in reasoning, originality lies not in discarding the necessary laws of thought, but in using them to express new intellectual conceptions; in poetry, originality consists not in discarding the necessary laws of rhythm, but in finding new rhythms within the limits of those laws. Most of the features of architecture that have persisted through various fluctuations of taste, owe their preservation to the fact that they have been proved by experience to be necessary; and it will be found that none of them precludes the exercise of individual taste, any more than the acceptance of the syllogism or of the laws of rhythm prevents new thinkers and poets from saying what has never been said before. * * * All good architecture and good decoration must be based on rhythm and logic. * * * To conform to a style then is to accept those rules of proportion which the artistic experience of centuries has established as the best, while within those limits allowing free scope to the individual requirements which must inevitably modify every house or room adapted to the use and convenience of its occupants."

TEST QUESTIONS

THE HOUSE

Its Plan, Decoration and Care

PART II

Read Carefully. Place your name and address on the first sheet of the test. Use a light grade of paper and write on one side of the sheet only. *Do not copy answers from the lesson paper.* Use your own words, so that your instructor may know that you understand the subject. Read the lesson paper a number of times before attempting to answer the questions.

---

1. Name some considerations that influence in determining the (a) site of a house, (b) materials, and (c) general appearance of a house.
2. What disadvantages arise from an unwise distribution of floor space?
3. Name the different types of entrances.
4. Describe the advantages and disadvantages of a reception hall plan.
5. What are some of the special needs of farm houses?
6. Which of the nine plans illustrated do you like best? Why?
7. Give some distinctive characteristics of the (a) parlor, (b) living room, (c) dining room, (d) library, (e) chambers.

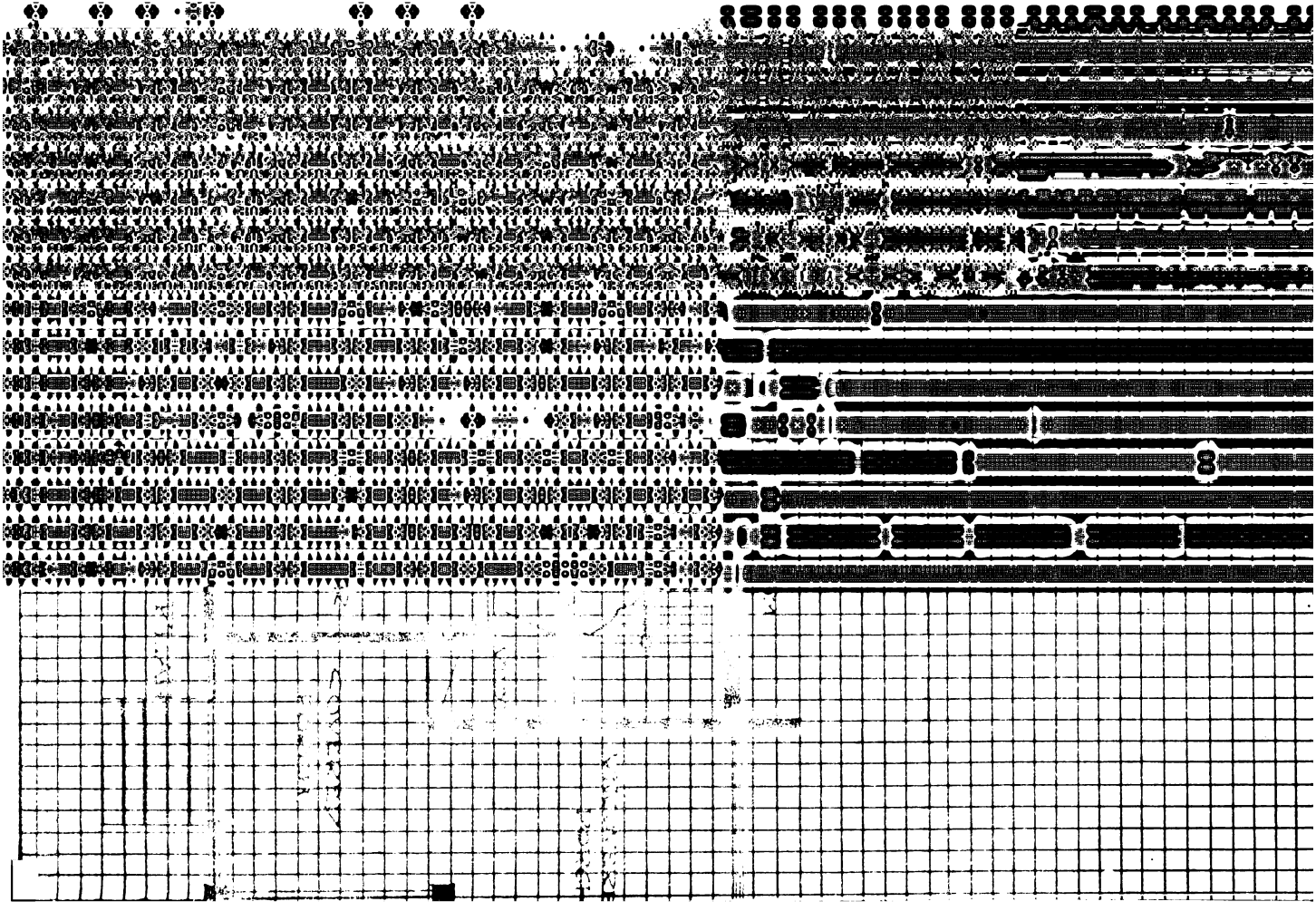
8. Which type of kitchen plans do you prefer? What are your reasons?
9. How is ease secured in stairs?
10. What are the advantages of a combination stairs?
11. Complete the plan you like best (No. 1, 3, 4, 5, or 6) for the first and second story. Make your drawing twice the size of the illustration, i. e., scale ⅛ inch=1 foot, using cross section paper.
12. Indicate on your sketch the position and size of range, sink, refrigerator, and dining room table on the first floor, and of the beds and bureaus on the second floor, determining their position by using small bits of paper as described on page 95.

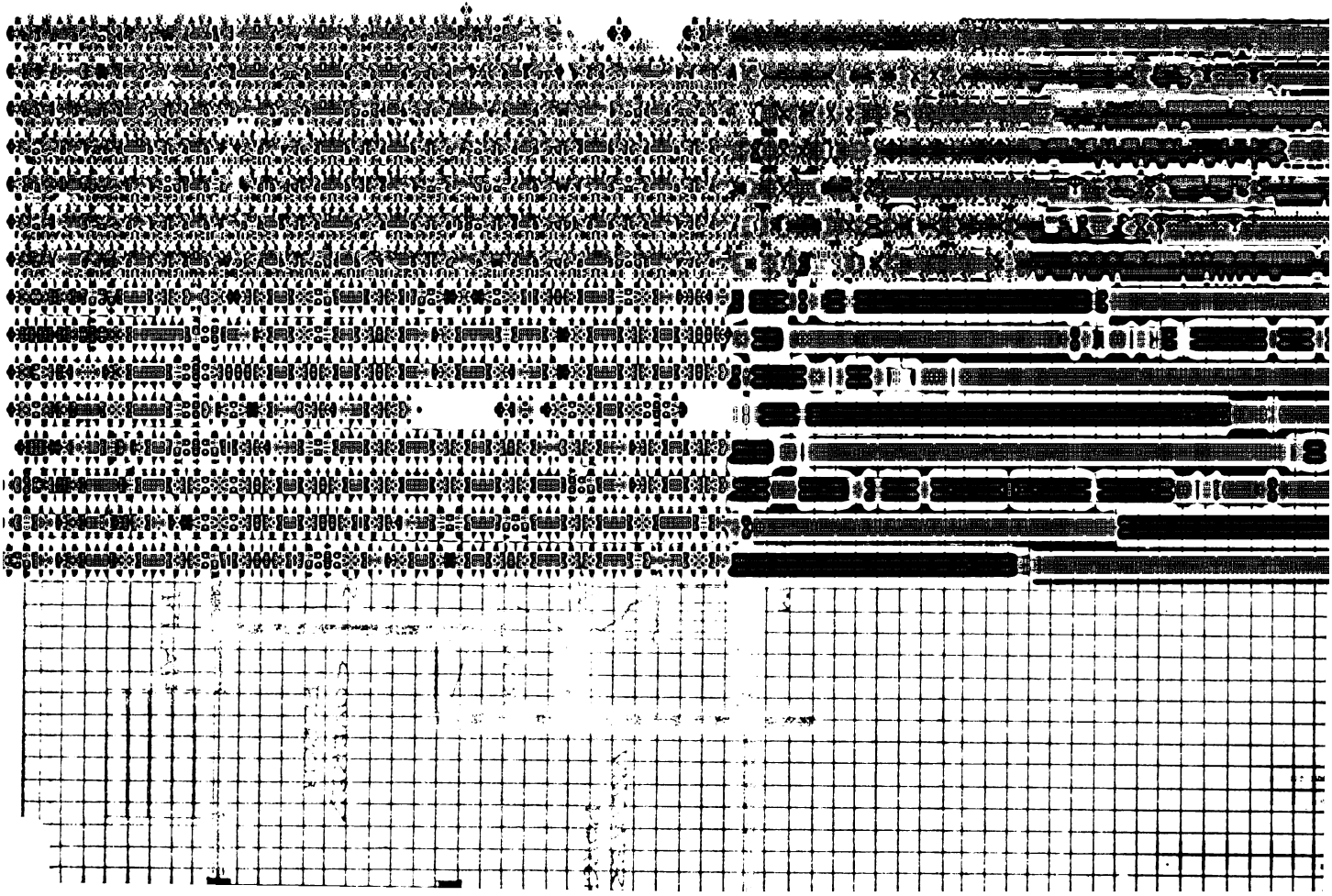
Note. After completing the test sign your full name.

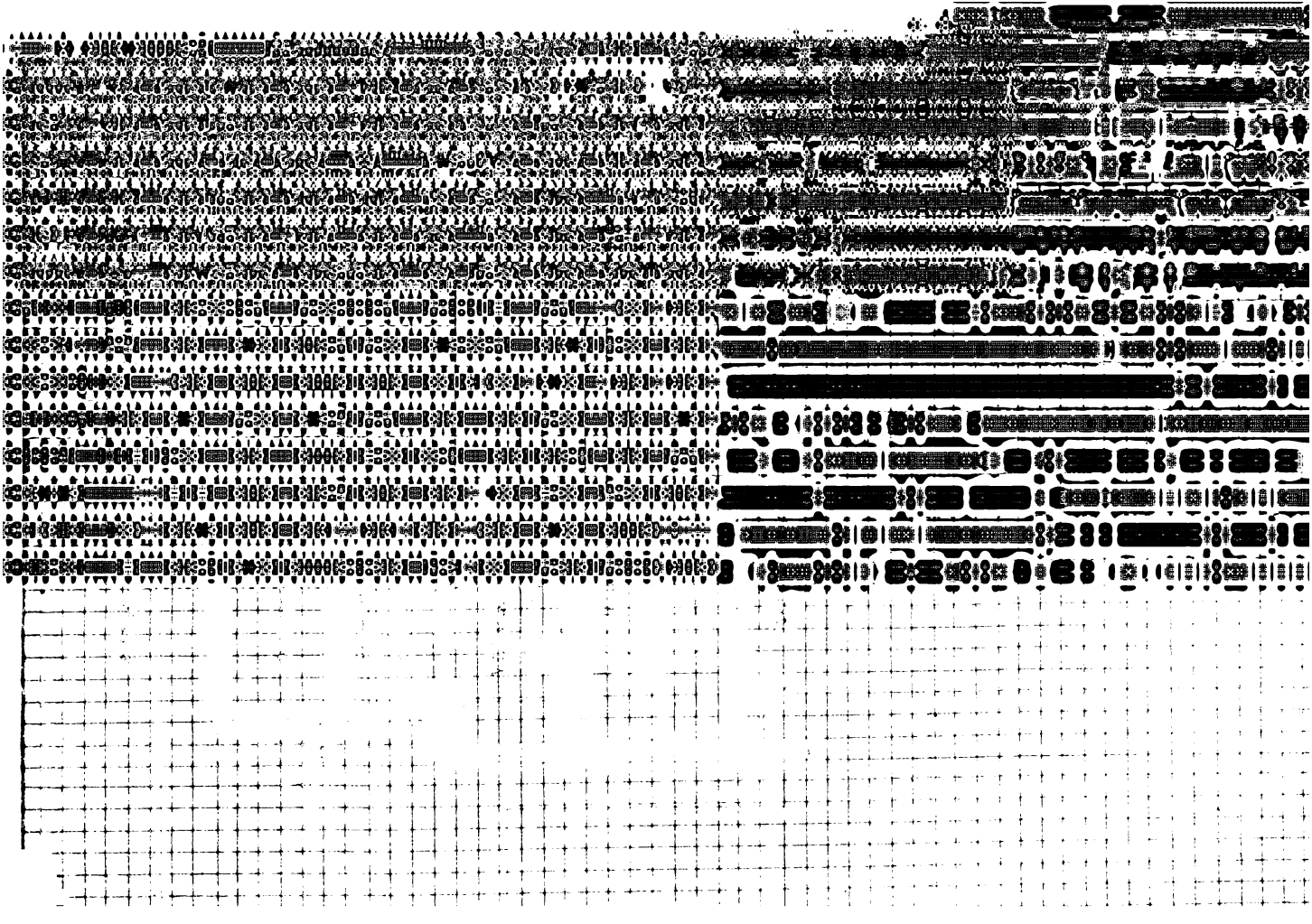
NOTE

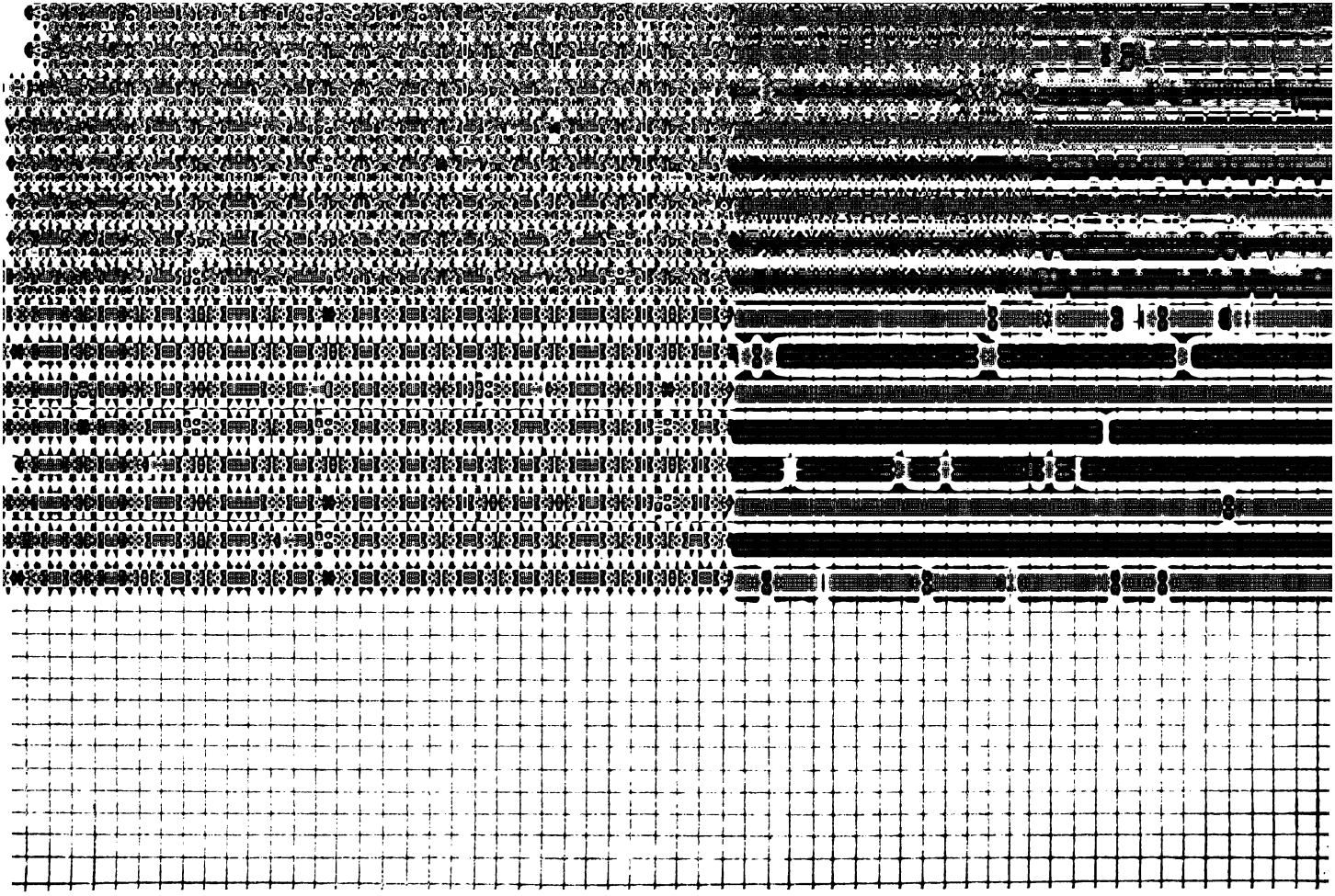
The following are reproductions of Plans No. 4 and 5 on cross section paper,—⅛ inch equals 1 foot. They may be cut out and used in answering Questions 11 and 12 of Part II, or if one of the other plans is preferred, it may be drawn on the back of the sheets, double the size as printed in the book. Complete one or more plans. A pencil may be used.

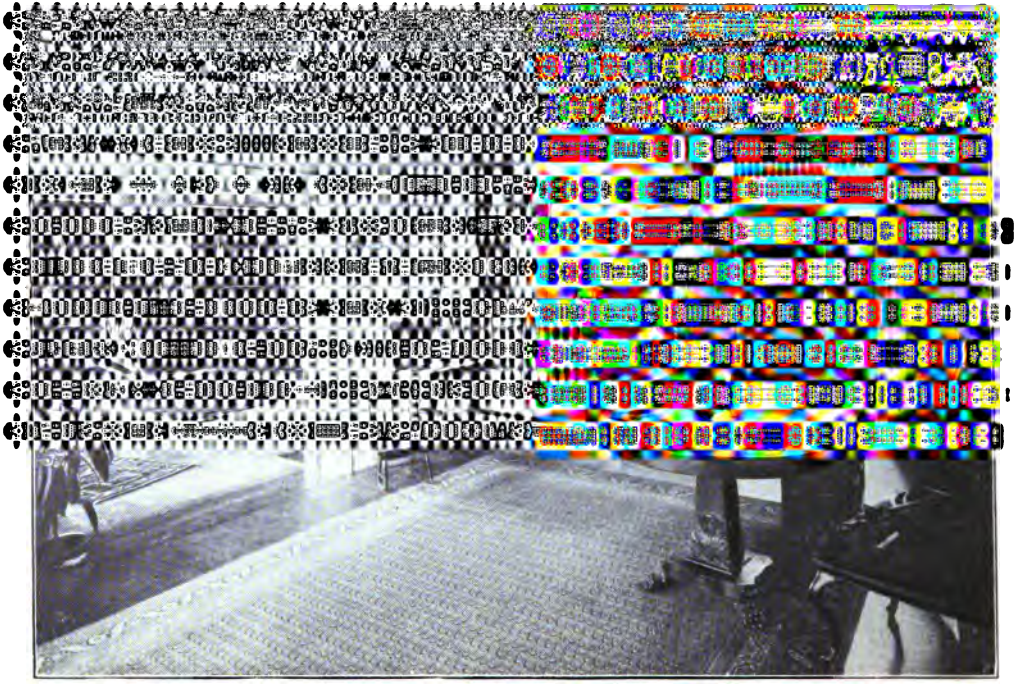
DINING ROOM
R PLAN











HALL AND STAIRWAY IN NEW ENGLAND COLONIAL STYLE

Frank Chouteau Brown, Architect

THE HOUSE

Its Plan, Decoration and Care

PART III

CONSTRUCTION OF THE HOUSE

Perhaps an outline will afford the simplest method for suggesting some of the points to be considered in the construction of the house.

THE HOUSE

Outline

(1) Structure adapted to
- Location,
- Environment,
- Purpose of the owner.

(2) Preparation of the soil for, includes
- Removal of the top soil,
- Grading,
- Drainage.

(3) Foundation Walls
- Materials,
- Size,
- Manner of laying,
- Height above ground.

(4) Cellar
- Structure, floor and walls,
- Drainage,
- Divisions,
- Inner finish,
- Ventilation,
- Lighting.

Before considering the superstructure, we will stop a moment to amplify some of the points suggested.

The adaptation of the structure to its intended uses has already been considered.

Preparation of the Site

The removal of the top soil prevents it from being mixed with the lime, sand, and cellar dirt, and leaves

it ready for use in the growing of the grass later. If this precaution is not observed it may be necessary to bring good soil from elsewhere.

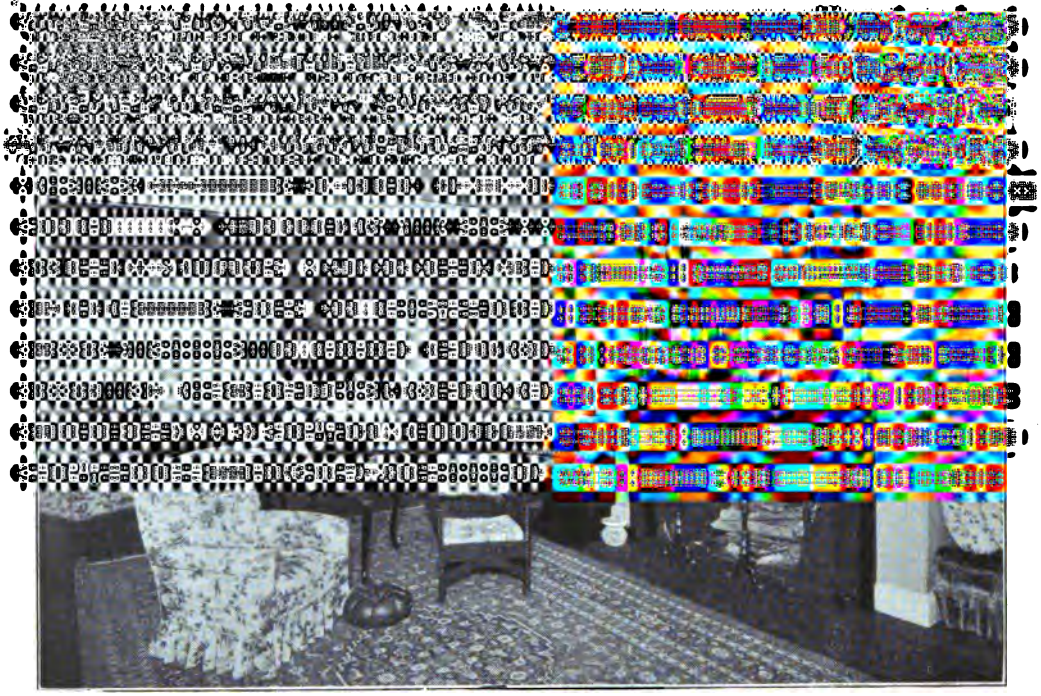
Foundation

The materials of the foundation will be either brick or stone, according to the expense. Stone is usually more expensive and is generally considered better than brick, but owing to the difficulty in securing good stone masons to lay the stone properly, brick has grown into favor and is preferred by some good builders, especially above the ground line. Neither brick nor stone should be laid in freezing weather and only *cement* mortar, to keep out dampness, should be used for walls below ground. The thickness will depend upon the kind of superstructure. F. C. Moore says in "How to Build a House," "Foundation walls should not be less than twelve inches if of brick, nor less than eighteen inches if of stone." The part of the walls above the surface of the ground should not be less than eighteen inches in thickness.

The Cellar

One feels inclined to beg that special emphasis should be given to the construction of the cellar, for out of it issues so much that makes for health or disease. Probably it will never be known how much of the low state of vitality found in some families is to be charged to an illy ventilated, badly lighted, poorly drained cellar used as a storehouse for decaying vegetables and sending its foul germ-laden air to every part of the house.

It is more sanitary to have the cellar under the whole house and adds very little to the expense. Its



A SUMMER LIVING ROOM
Frank Chouteau Brown, Architect

PARLOR IN NEW ENGLAND COLONIAL STYLE

Frank Chouteau Brown, Architect

ceilings should not be less than seven feet high, plastered if possible on metallic lathing. The side walls should be whitewashed. The floor made of concrete. It should be well drained, well lighted and partitioned into such rooms as have definite uses. The vegetable room should be separated and fitted for its purpose.

SUPERSTRUCTURE OF THE HOUSE

(1) Framing
- Balloon,
- Braced.

(2) Walls
- Materials,
  - Wood,
  - Stone,
  - Brick,
- Shingles.

(3) Floors
- Construction,
  - Single,
  - Double,
- Manner of laying,
- Deafening,
- Sweeping molding.

(4) Chimneys
- Built from ground,
- Walls of flues (eight inches thick),
- Lined with fire clay or flue lining.

(5) Doors

(6) Windows

(7) Closets

(8) Devices for
- Strength,
- Warmth,
- Dryness,
- Safety from fire,
- Preventing shrinkage.

(9) Porches

(10) Roofs
- Material,
- Manner of laying.

Of the two kinds of framing, that known as the braced is the more expensive and stronger.

[illegible] strong enough for [illegible] erally used. See [illegible] xpense of building [illegible] hat they are more [illegible] ood is the material [illegible]

[illegible] ilding is, in gen-

BALLOON FRAME.
[illegible] braces; *f*, Studs; *h*, Sill; [illegible] ridge-board [illegible]
[illegible] fastened together with mor- [illegible] pieces are simply nailed, [illegible] stiffness. A combination

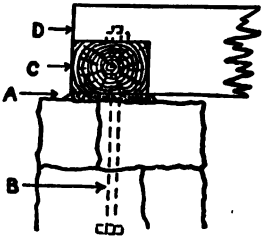
[illegible] st of a frame of [illegible] or 2 in. by 6 in., [illegible] center to center. [illegible] boards, then with [illegible]

[illegible] laths and plaster. [illegible] studding covered

on both sides with laths and plaster. The laths should be green, that is, not dried, for the wet plaster would cause them to warp. The first coat of plaster, called the "scratch coat" because it is scratched or roughened in order to hold the next coat, should be allowed to dry thoroughly before the second coat is laid over. Much of the falling, cracking and annoyance with plastering comes from the lack of this precaution.

The Sill

The studs of the outside wall should stand on a heavy timber called a *sill,* which rests on top of the cellar wall. At the top of the walls the horizontal piece, called the *plate,* is placed, on which rest the lower ends of the *rafters* forming the roof pieces. The rafters are covered with boards and these with shingles.



SILL PLACED ON WALL.
a, Cement; *b*. Anchor Bolt; *c*, Sill; *d*, Girder,

Girders

The *girders* are the heavy timbers set level with the beams of the first floor, on which stand the studs of main interior partitions.

Shingled Houses

Shingle houses are much in favor in some localities and make very attractive and inexpensive homes. Cedar shingles "weather" to a grey tint that is pleasing, but many prefer the brown or green stain. Shingle houses are a little more expensive than plain wooden ones.

Floors Floors should be of well-dried, carefully selected material. The beams are usually two inches thick and ten inches wide; but if one or two inches be added to each of these dimensions the extra cost will add to the strength of the floor and tend to prevent cracks in ceilings and walls due to vibrations. It is better to have the floor double and to put asbestos paper or salamander between the two layers. The paper serves as fire resisting material as well as to deafen the sounds. The under floor should be nailed diagonally. The baseboards should be set upon the under floor if the floors are double, or tongued into the floor plank if the floors are single, to prevent the unsightly cracks that sometimes appear between the floor and baseboard. The sweeping molding should be convex so as to shed rather than retain dust and moisture.

Windows In general, doors and windows should be of a uniform size and height.

In a city house, recently, the writer counted windows of nine different shapes and sizes on the front of a single house.

The small leaded or colored glass window may have its place in the dining room or library where light is wanted without the view; and the French windows which open like doors may sometimes be desirable, but usually the ordinary sized windows hung on weights will prove more practicable for the admission of light and better adapted to keep out the storm. The writer was impressed with the limitations of casement win-

[illegible] in a bedroom [illegible] opening on [illegible] on the drive [illegible] ing air in the [illegible] were, to the

[illegible] the fact that [illegible] quently wandered [illegible]

[illegible] should be taken [illegible] sired. Closet [illegible] doors should [illegible] veal the bed. [illegible] rovide against [illegible] desirable in

Doors

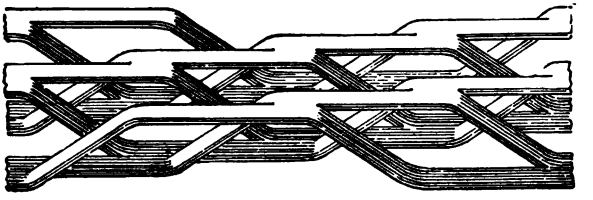
door a little larger perhaps glass in ds below the upper rivacy desirable in

by a generous use mineral wool and ing is so good a tor as a dead air double walls with between are of e in this respect. almost criminal less in the matter s. Yet this is so ase in the ordinary en far removed help of any fire de- Hollow partitions, eases and spaces in from cellar to gar- ing flames. These floor by plaster, th for ceiling, as- he floors, ordinary king a "slow burn-

FLOORS

Material

Volumes might be written upon the subject of floors and their finishing, covering and care. Pine, hard and soft, maple, ash, and oak are the kinds of timber most often used in floors. Soft pine has the advantage of being least expensive. Oak is by many considered the best wood for floor uses, particularly if it is quarter-sawn. All woods darken in time if treated with oil.



METALLIC LATH.

Maple is preferred by those who object to the dark floors, as the closeness of its grain prevents the rapid absorption and consequent darkening by oil. The stained, painted, oiled or waxed floor partly covered by rugs is steadily growing in favor and displacing the floor covered with carpet.

Advantages of Finished Floors

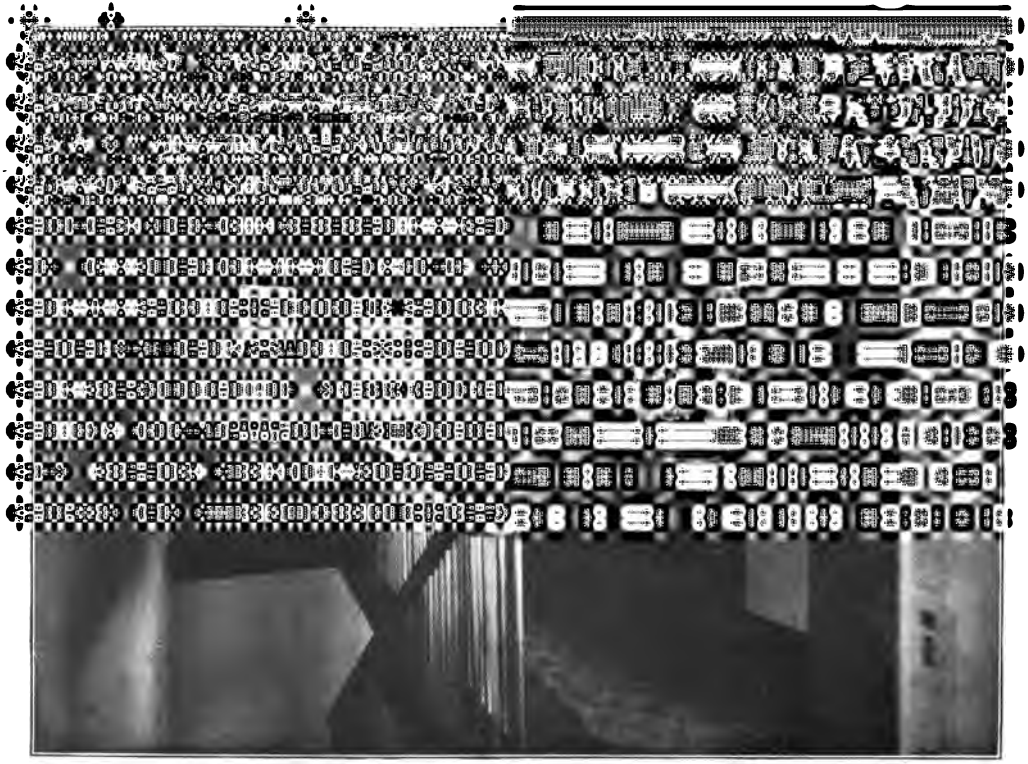
There is much to be said in favor of the finished floor. It saves the tugging and pulling sometimes necessary to make the carpet fit. It simplifies very much the problem of house cleaning. Instead of that week or two in the spring and fall when all the carpets were taken up, pounded, beaten, stretched and pulled

with the resulting finger and back aches, with the rug covered floor, the rugs are removed as often as need be, shaken, the floors wiped off with a damp or oiled cloth and the rugs relaid with much less expenditure of energy. The rugs are much lighter and easier to handle and the dust which accumulates under the ordinary carpet is thus dispensed with; so the rug covered floor is apt to be more sanitary. Some people object to any bare floor where there are children or elderly people. This can easily be obviated by the use of large rugs with borders of matting or filling.

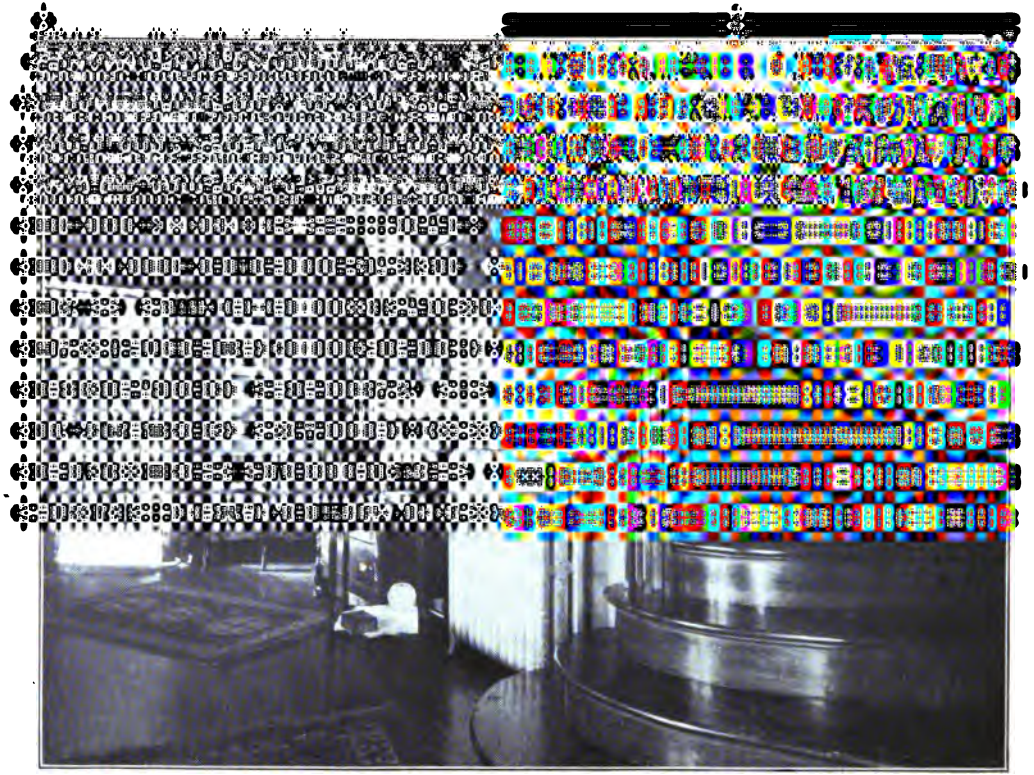
No exact statistics can be given as to the comparative time required in caring for a room with waxed or painted floors with rugs, and one covered with carpet. The testimony of one woman who had the care of eight carpeted rooms for years, is given. After one of them had been transformed by floor finish and two rugs, she said that she would rather care for three such rooms than one carpeted one.

Kind of Finish

The question as to whether the finish shall be paint, varnish, shellac or wax must be decided by the expense and by the use of the rooms. Wax and varnish are not desirable if the floor is to be subjected to the tread of many dusty feet. The oiled or painted floor will stand the wiping with the damp cloth to remove the dust much better. A little kerosene or milk added to the water used in sponging will serve to brighten either the paint or oil.



THE UPPER HALL PLAN No. 2.



AN ATTRACTIVE HALL WITH HARDWOOD FLOORS
From House in Plan No. 2, Page 62.

Before a floor is treated with varnish or wax, the pores of the porous woods are usually filled with a paste filler, which may be combined with a stain if other than natural finish is desired. This treatment brings out the grain of the wood and prevents the absorption of too much of the more expensive finish.

Varnished Floors

Varnished floors are perhaps easiest to keep clean and when newly finished look well, but they are easily marred and become unsightly in places where there is much wear, especially if the varnish is not of the very best quality. The cost of the *best* materials is small in comparison to the cost of labor in finishing floors. Refinishing is always an expensive process, so that it is economy to use the best varnish obtainable. Much expense will be saved by re-varnishing at the first sign of wear, for if the surface becomes broken, the wood underneath absorbs dirt, and scraping or planing may be required to remove it. It will be found cheapest in the end to apply a thin coat once a year, or oftener if necessary.

Shellaced Floors

Many housewives find shellaced floors easiest to manage. Shellac varnish is made by dissolving gum shellac in either grain or wood alcohol. The varnish which one buys is apt to be adulterated with cheaper, inferior gums, so that the surest way to get pure varnish is to make it for oneself. The materials can be obtained at almost any drug store. To make sufficient quantity for small repairs, six ounces of light yellow flake shellac may be added to a pint of alcohol. The

gum will dissolve in about an hour and make a varnish of proper consistency for floors. It is best to strain the varnish through cheesecloth before using. The varnish will dry in less than an hour and makes a very hard surface. All varnish should be applied with long, slow strokes of the brush and *with* the grain of the wood.

In repairing a varnished floor which has been neglected, the much worn, dark places may be scrubbed with water and a fine sand soap, like sapolio, until clean; then be given a preliminary coat of varnish, and after these places have dried, the entire floor should be varnished.

Waxed Floors

Many think that wax makes the most desirable and lasting floor finish for the living rooms. The expense of this finish is somewhat more than the varnish finish because of the greater amount of labor required. Clark in "The Care of the House" recommends that a new floor be treated with two coats of linseed oil and turpentine mixed with enough Japan dryer to dry over night. This is put on to prevent the floor from showing spots. When this is dry, two coats of floor wax are applied and after standing over night, rubbed thoroughly into the wood and polished with a weighted brush made for the purpose. A waxed floor should be given a new coat of floor wax every year or oftener in the places subjected to hard wear. A floor so treated will last for a long time. One objection to the wax finish is that water will turn the coating white.

The floor must be cleaned with a dry cloth or mop or one which is only slightly *damp* and rubbed occasionally with the weighted brush. If the floor becomes spotted by water through accident, the damage can be repaired easily by applying a little wax and rubbing with the brush. If the floor becomes soiled or stained the wax may be removed by turpentine, the spot treated and the place covered anew with wax. Ink or iron stains may be removed with a solution of oxalic acid.

Kitchen Floor

No entirely satisfactory finish for the kitchen floor has yet been found. The time honored way of scrubbing with soap and water makes the whitest and cleanest looking floor, it is true—but the work required! It does not seem to be an economic condition to have the floor of the work shop such that nothing may fall upon it. Linseed oil, frequently applied, makes a finish in every way good if it were not for the unsightly darkening. When the wood is thoroughly filled with oil, nothing will produce a spot on such a floor, not even grease. It may be wiped up with a wet cloth but should not be scrubbed with soap and water.

Linoleum

A good grade of linoleum makes a floor covering most easily cared for. When this is to be used there is no necessity of laying an expensive hard wood floor in the kitchen. This does not mean, however, that the floor need not be carefully laid, for if any of the boards warp the linoleum will be quickly worn through in the raised parts.

Oiling

The clear boiled linseed oil is applied hot. The first essential in the care of any finished floor is that it should be perfectly *clean* and dry before oil, wax or varnish is applied.

The floors of pantries, back hall and stairs may well be finished in oil.

Expense of Finished Floors

The expense so often urged against a hard wood floor does not seem to be borne out by the following statistics—carpets to look well must be frequently removed while waxed or oiled floors may be kept in order for years with slight additional expense.

The utmost care should be used in securing well dried material for floors, and eternal vigilance is required to prevent new floors from being ruined by careless workmen before the house is finished.

Comparative Cost of Floors

The following table compiled from recent estimates will answer some of the questions concerning the cost of new floors per square foot.

1. Cost of soft pine floor,

Laid unfinished	3½	cents
Stained	⅝	"
Total cost of floor	4⅛	cents

Painted

2. Cost of soft pine floor,

Laid unfinished	3½	cents
Painted two coats, cracks not puttied	1½	"
Total cost of floor	5	cents

3. Cost of hard pine floor, **Oil**

Planed and scraped	7	cents
Oiled with one coat of hot linseed oil	⅜	"
Total cost of floor	7⅜	cents

4. Cost of hard pine floor, **Shellac**

Planed and scraped	7	cents
Stained and two coats of shellac	2	"
Total cost of floor	9	cents

5. Cost of soft pine floor, **Carpet**

Laid unfinished	3½	cents
Cost of ingrain carpet at 65c per yard	7.2	"
Total cost of floor	10.7	cents

6. Cost of soft pine floor, **Plain Linoleum**

Laid unfinished	3½	cents
Cost of plain linoleum at 65c per yard	7.2	"
Total cost of floor	10.7	cents

7. Cost of straight oak floor, **Oak**

Planed and scraped	9	cents
Stained, filled and two coats of shellac	2½	"
Total cost of floor	11½	cents

Oak and Wax

8. Cost of straight oak floor,

Planed and scraped	9	cents
Stained, one coat of shellac and wax	2½	"
Total cost of floor	11¼	cents

Brussels Carpet

9. Cost of soft pine floor,

Laid unfinished	3½	cents
Cost of Brussels carpets at 80c per yard	9	"
Total cost of floor	12½	cents

Inlaid Linoleum

10. Cost of soft pine floor,

Laid unfinished	3½	cents
Cost of inlaid linoleum at $1.10 per yard	12.2	"
Total cost of floor	15.7	cents

Quartered Oak

11. Cost of quarter sawed oak floor,

Planed and scraped	14	cents
Stained, filled and three coats of varnish	5	"
Total cost of floor	19	cents

The above cost is given in items of sq. ft. from which it is easy to obtain the cost per sq. yd. if one remembers that nine sq. ft. make one sq. yd.

One or two examples are worked out for the sake

of comparison. For example: What is the cost of the floor in a room 15 ft. square with

Examples

1. A soft pine floor covered with ingrain carpet?
2. A soft pine floor covered with Brussels carpet?
3. A hard pine floor, planed and scraped, with one coat of oil?
4. A hard pine floor planed, scraped, stained and with two coats of shellac.

A room 15 ft. square contains 25 sq. yds.

The table shows (No. 5) that a soft pine floor with ingrain carpet costs 10.7 cents per sq. ft.=96.3 cents per sq. yd.

25 sq. yds. cost 96.3x25=$24.075.

A room of the same dimensions of soft pine covered with Brussels carpet (No. 9) costs $28.125.

If the floor to be of hard pine treated as in No. 3, the cost will be $16.59.

If the floor be of hard pine treated as No. 4, the cost will be $20.25.

OLD FLOORS

Suggestions

Many people who would be glad to have the benefit of the use of rugs, feel that they cannot undertake either the trouble or expense of having new floors laid. For such the following suggestions, which have been carried out in actual practice, are given. One woman wished to make over an old soft pine floor, but found the wide cracks a great detriment. She overcame this difficulty by stretching very tightly over the floor

strips of old sheeting. To this she applied two coats of paint and thus secured a very satisfactory "border" to her room, the center of which she covered with a rug made of old ingrain carpet which had been ravelled out and woven over.

Another woman secured a very good looking floor from an old, soft pine one with wide cracks by applying first, a coat of linseed oil, after which the cracks were filled with a "crack and crevice filler," then an oak stain and two coats of floor finish were used. The wood work of the floor was inconspicuous because it was of the same general tone as the rest of the wood work of the room.

This treatment of the floor cost $5.00 and the floor is in quite good condition after two years constant use.

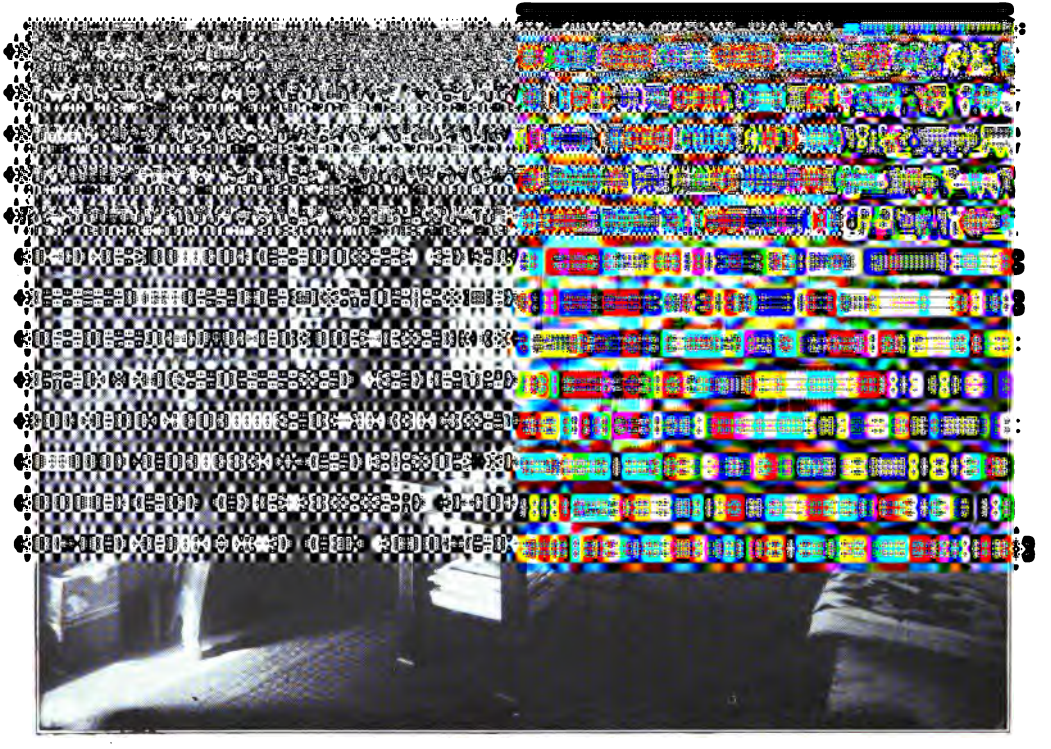
Color

In treating an old floor it is well to avoid the use of bright colored stains or paints as such treatment calls attention to the floors; also very dark colors are to be avoided as they show the dust more easily than lighter colors. At the same time it is to be remembered that in the general color scheme of the room, the floors are supposed to carry the deepest tones, the walls to be lighter and the ceiling still lighter. It is well if possible to have the color of the floor blend with the color of the baseboard and with the border of the rug.

Floor Coverings

The kinds of floor coverings now on the market are so numerous that one can hardly fail to find a suitable one. Fiber carpets and mattings of good color and de-

sign can be obtained for a comparatively small sum. Then there are a great variety of American rugs. The "Smyrna" rugs made in Philadelphia are very satisfactory. Oriental rugs with their beautiful durable colors are a constant source of pleasure. It ought to be remembered in selecting any floor covering that the walls and floors are to be a background for the other furnishing. Therefore, patterns and colors that "rise up and hit you," startling colors, immense bouquets and in general large designs are to be avoided. Bright colors in a small pattern or a conventional design make a much better background.



A LIVING ROOM AND LIBRARY COMBINED.
View Looking Towards the Fireplace, Plan No. 5, Page 70.

DECORATION AND FURNISHING

No problems of household management are perhaps more trying to the average woman than those of decoration and furnishing. The daily paper will provide her with menus for every day in the week, with directions for the preparation and the service of the food. The current magazine will give her numerous suggestions for her clothing, but she finds fewer helps in the line of decoration and feels a greater need for assistance there.

The subject is a large one. Let us begin with some questions.

Decoration Defined

What does decorate mean? To embellish; to adorn. The savage decorates his body with paint; his tools by carving them. The child easily learns to say "pretty," "pretty;" and the woman tries to express her sense of beauty in her house furnishings. Why does she so often fail? Usually for one of three reasons, viz.: (1) Because of a lack of trained color sense; (2) Because she overlooked the law of appropriateness; (3) Because of the lack of means. But no amount of money can compensate for the failure to appreciate the value of color and appropriateness.

Proportion

The definition of decoration sometimes leads one astray by giving the impression that decoration applies to something *added* and has nothing to do with the original construction, while the truth is that good decoration in houses has its beginning in good architecture and that a room which has good lines and good

proportions will require less decoration and look much better than one not so constructed.

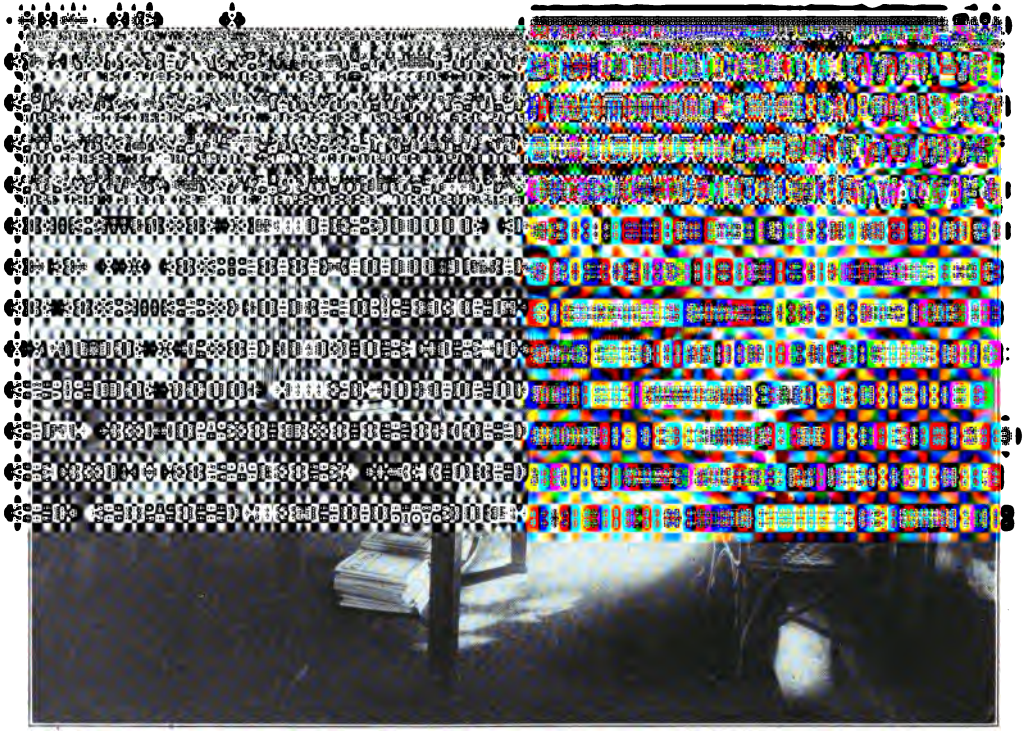
Color Sense

A trained color sense is not an easy thing to acquire; it is born of association with the beautiful, and some people's opportunity for seeing the beautiful creations in the way of art treasures and good architecture has been limited.

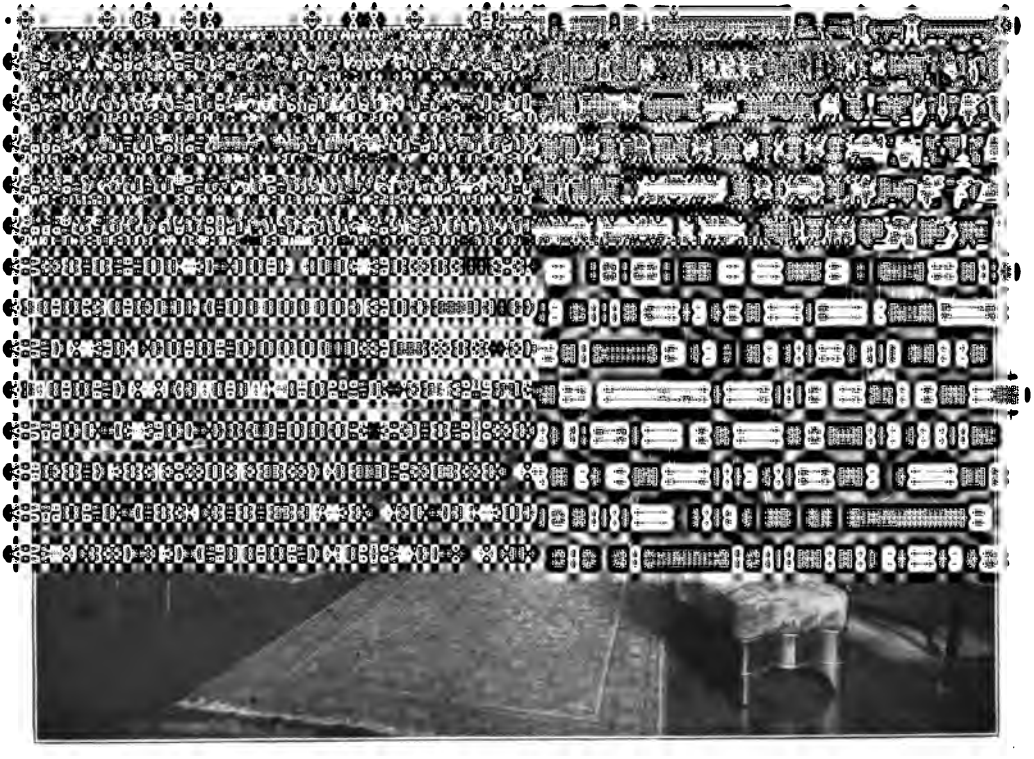
However, one should not be discouraged. Nature shows us beautiful things in form and color, so most of us have access to at least one great teacher. Moreover, the world is waking up to the pleasure and profit to be found in developing the artistic instinct. Copies of the really good pictures of the world are being made for moderate prices. The school children are being trained in form and color, and William Morris's definition of decoration, "To give people pleasure in the things they must perforce use; that is the one great office of decoration. To give people pleasure in the things they must perforce make; that is the other use of it", is being appreciated more and more.

Good "Lines"

Where then shall the decoration begin? With the lines of the room. If the house be new, it is to be hoped that the builder has realized the truth of the statement, "Proportion is the good breeding of Architecture". If the room is not in right proportion, decoration should begin in the consideration of what may be done to make the lines of the room good. If the ceiling be too high, the effect of lowering it may be given by allowing the ceiling paper (or calcimine) to



A CHEERFUL LIVING ROOM. PLAN No. 5, PAGE 70.



A LIVING ROOM DEVOTED TO MUSIC.
See House Plan No. 2, Page 62.

extend a foot or more on the side wall. The picture molding may be put on where the ceiling paper meets that of the side wall. If the pictures are hung from this molding and brought down to the level of the eyes, one is helped to the impression that the molding marks the line of the ceiling. "Skied" pictures that one must stretch one's neck to see are never decorative. A wainscoting and frieze help greatly in breaking up a high side wall.

Low Ceiling

Again, if the ceiling be low a striped paper, where stripes extend from baseboard to ceiling, will make the ceiling appear higher than it really is.

The apparent height of windows may be changed by their drapery.

Wall Spacing

The opening of a door in the opposite way or the closing up of it altogether, may materially improve the wall spacing of the room.

Color

After lines and proportion comes color, and here one meets many difficulties because so many factors enter into the problem. The quantity and quality of light that enters the room, the use of the room, the "livableness" of the color, all are to be considered. For example, a pink or lavender ribbon may give just the finishing touch to a young girl in a white muslin dress, but a living room in pink or lavender may prove something of an undertaking "to live up to" three hundred and sixty-five days in the year. The psychology and physics of color are not easily given in set formulae. A few general principles may prove helpful.

White Light

White light may be separated into what are known as the seven primary colors, red, orange, yellow, green, blue, indigo and violet, although there are a great number of different shades of these colors. In a stricter sense red, green and blue are the primary colors because they can not be resolved into any others.

Complementary Colors

Complementary colors are those colors which when combined produce white light. Rood in his "Textbook of Colors" gives the following Table of Complementary Colors:

Red	Green blue.
Orange	Cyanogen blue.
Yellow	Ultramarine blue.
Greenish yellow	Violet.
Green	Purple.

A knowledge of complementary colors is important because these colors furnish the strongest contrasts. Again there are the "cool" colors—blues in various grades, grays, apple green; warm colors are reds, golden browns or pure gold, olive green. Colors are also classified as grave, gay or somber.

Harmony

Harmony and appropriateness are to be carefully watched in the selection of color schemes. Harmony is secured by the skillful blending of colors of somewhat the same tone. Contrasting colors emphasize each other and should be used with care. For example, in a room in which the walls are colored bright red and the floor covered with a bright green rug, the contrast between the two colors will make both stand out more

plainly. Where the background of floor and walls is so striking it is difficult to have the furnishings blend with the colors already present. In simple furnishing it is better to choose some one prevailing color as the predominant one rather than two contrasting ones.

Color and Lighting

The quantity and quality of light which enters the room will prove a potent factor in selecting its color schemes. A room with a southern or western exposure is likely to be well supplied with brightness and sunshine and needs to have its brightness modified by cool blues or greens, so a west dining room in red is apt to seem too warm most of the year, while a sunless north room needs the yellow and gold to be brought to it in the colors of its walls and draperies. Golden browns and rich reds have their place in such rooms.

Principle of Gradation

One more principle is of universal application in the consideration of color effects. It is known as the principle of gradation. According to it the strongest tones of color belong at the base. In a room the floor serves as the base in any scheme of decoration. The floor covering, therefore, should carry the strongest tones, the walls should represent the next lighter tone and the ceiling the last step in the gradation. This does not imply any fixed line of demarcation for the varying tones. It is rather the statement of a general relation that is to be maintained among the various parts. The floors, walls and ceiling should sustain a certain relation to each other, while they are the setting for the furnishings. The application of this principle forbids

the use of light gray paint for the floor with deep blue walls and ceiling, though blue and gray in some combinations might be most desirable.

Appropriateness

The law of appropriateness if practiced would remove many things from our homes; the spider web tidies that protect nothing, the gilded spoon tied with a ribbon and hung in the parlor, the bric a brac from the sitting room mantel that must be dusted every day, the meaningless pictures, the very light and delicately upholstered chair from the sitting room, the pitcher that will not pour from the dining room. It would exchange this rubbish for one beautiful picture, or comfortable chair, or a table that will hold something and thus add simplicity and comfort to the house.

Diamonds are always valuable and beautiful but they are not the proper accompaniment of morning dresses. They show to better advantage among velvet and laces; so velvet carpets and real lace curtains are not to be expected in the living room.

Relation of Rooms

Rooms must be considered not only as individual rooms but in their relation to the other parts of the house, if one would have the house a harmonious whole. To this end sharp contrasts in size of rooms, color and furnishings are to be avoided. One should not be ushered from a bright green parlor with handsome mahogany furniture to a dull and faded sitting room with the cast off and worn out parlor furniture. Such contrasts show that emphasis is put upon display rather than comfort in the house. Bright green is

rarely if ever a suitable color for a wall, and half worn, cast off furniture is neither useful nor beautiful anywhere.

Design is another important factor in decoration, as is also the kind of material.

PRINCIPLES OF SELECTION

Avoid the Pretentious and Unusual

Certain general principles apply in the selection of decoration and furnishings. Avoid pretentious things. If real lace cannot be afforded, sham lace ought not to be allowed. Muslin curtains are better adapted to the purpose and much prettier than sham lace ones. Get simple things, few things, durable things and such as will harmonize with many others. Avoid the unusual; chairs with impossible twists in their legs; tables with glass and brass feet; settees, whose arms are "decorated" with hearts set on at irregular intervals and whose backs are "finished" with marvelous clusters of grapes glued on. These and their kind make a room a museum for the keeping of curios rather than a place of rest and beauty.

Definite Plan

One should have a definite plan in mind for the decoration and furnishing of the whole house before it is begun. Possibly only the color scheme for the walls can be realized the first year with a few pieces of good furniture, but these will be a pleasure because of the simplicity, harmony and comfort which they afford. Styles in furnishing vary; but good colors, good designs and appropriate furnishings are always in fashion and a satisfaction.

ROOMS

Perhaps a few concrete examples may help in the application of these principles of decoration. Let us begin with the vestibule—Certain additional principles apply in the selection of all furnishings, (1) The purpose of the room; (2) Its size; (3) The use of the article. These furnishings should be adapted to the purposes of a room so exposed as a vestibule. The floor coloring should be the deepest; a suitable gradation would leave the walls of a lighter tone with the ceiling still lighter. The amount of light will influence the color. The vestibule is not likely to be too well lighted, and therefore dull and dark colors are to be avoided. Pompeian red, or tints of brown corresponding with the natural finish of the wood are desirable.

Vestibule

The floor of the vestibule should be tile or linoleum that it may be easily cleaned. Owing to the effect that the weather may have upon the paper some prefer the use of rough plaster or paint. The window hangings should be of some washable material. The entrance is to shut out the world and at the same time serve as a pleasant introduction to the brightness and cheer within. Durable, substantial, and pleasing effects are to be sought in its furnishings.

The Hall

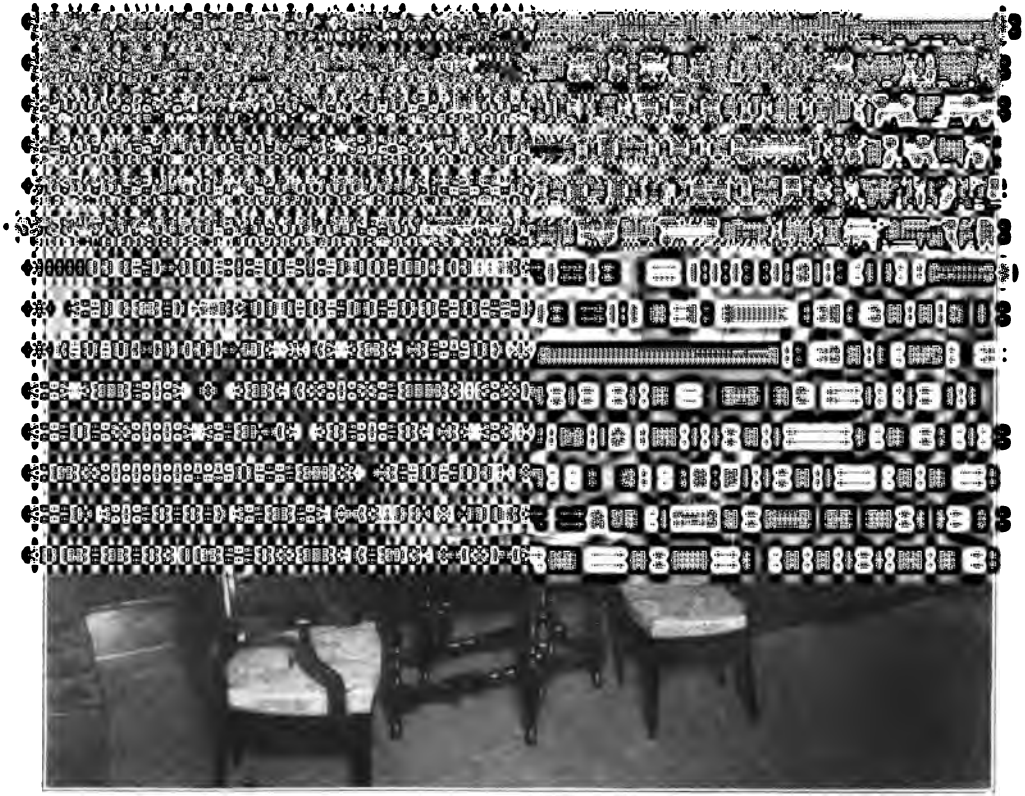
In the hall proper the same rules as to gradation of color hold. It is safer and better, if one is somewhat of a novice in the selection of color, to choose some one prevailing tone for the hall and the rooms that open from the hall in order to avoid a striking contrast,

and trust to relieve the monotony by a difference in the principal colors in the rugs. A grey green makes a comfortable color to live with, and the halls and rooms opening from it may have papers in which these colors predominate; varying shades of reds and browns may be used in the rugs.

Wall Covering

In wall coverings one has the choice of many materials, calsomine, papers of many kinds, grass cloth, burlap and its near relative fabrikona. The list as given indicates in a measure the scale of cost. Plain papers have their use and their abuse. A plain paper makes a good background for pictures and is less likely to introduce elements that are at war with the other furnishings. On the other hand too liberal a use of it in a house tends to monotony. Very good patterns may be found in two-toned papers. Of a given sum of money to be expended in wall covering, some prefer to use elaborate and expensive Morris or Crane papers and to omit all the pictures.

Grass cloth makes satisfactory hanging. Its slightly uneven surface gives pleasing effects in the distribution of light and shades. Burlap and fabrikona are more expensive but they can be painted and so renewed. Both give a somewhat severe and substantial air to a room. Too much of them in a small house gives a somewhat heavy effect. They are, perhaps, most suitable for library and dining room.



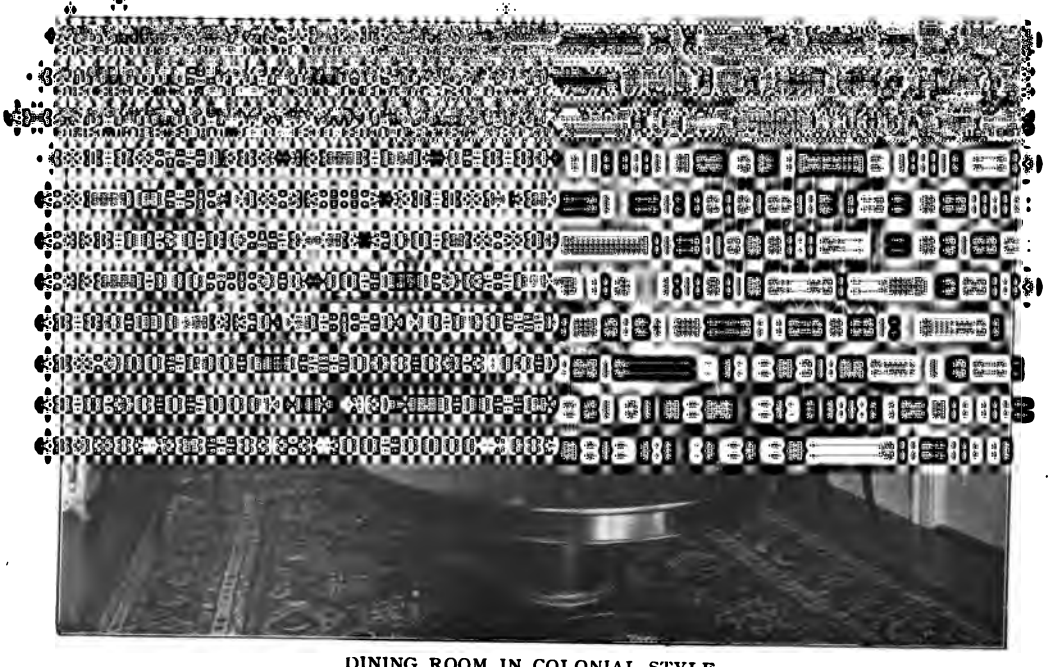
A MORRIS ROOM PAPER AND DRAPERIES FROM THE DESIGNS OF WILLIAM MORRIS.
Courtesy of The Tobey Furniture Co., Chicago

The Living Room

A two-toned green paper with a cream ceiling, weathered oak furniture and wood work, with Oriental rugs or American ones in shades of browns and a little red, make a satisfactory living room. Or one may use the copper brown tints for the walls with blues, browns and reds in the rugs. However, blue is likely to show soil and wear more easily than either browns or reds. Morris's words, "Have nothing in your house that you do not know to be useful or believe to be beautiful", finds especial application in the sitting room. Where so many tastes are to be considered as in the family living room one can hardly hope for great beauty, but there should be harmony, comfort, and restfulness suggested by all the furnishing as well as durability and appropriateness. Chairs that do not tip over easily; tables that will hold the lamp, books and magazines and leave a little extra space are quite necessary here. Draperies and bric a brac should be conspicuous by their absence; a beruffled lamp and a bedecked sofa cushion are alike undesirable. A good light and comfortable chairs are essentials.

The Parlor

The furnishings of the parlor are best characterized as delicate. Some one has said it corresponds to the afternoon tea toilet of the family. Whatever of elegance the family wishes to show will find its place here. Old rose or blues make a good background for the delicately upholstered furniture, the rare vase or bit of favrile glass, Oriental rugs with their mellowed tones will harmonize with almost any color.



DINING ROOM IN COLONIAL STYLE
Edmund Quincy Sylvester, Architect

The dining room requires little furniture besides the table, chairs and china which are its essentials. Soft yellow walls, mahogany furniture, ivory white paint and net curtains make a pleasing combination. Some prefer the Delft blue with cream ceiling, oak furniture and the Delft china displayed on the plate rail. The plate rail is a somewhat questionable feature, as sometimes used with a motley collection of old ugly china covered with dust, it is far from decorative. A sideboard on which a few good pieces are displayed at one time is likely to be more truly decorative, and a china closet built in, more useful.

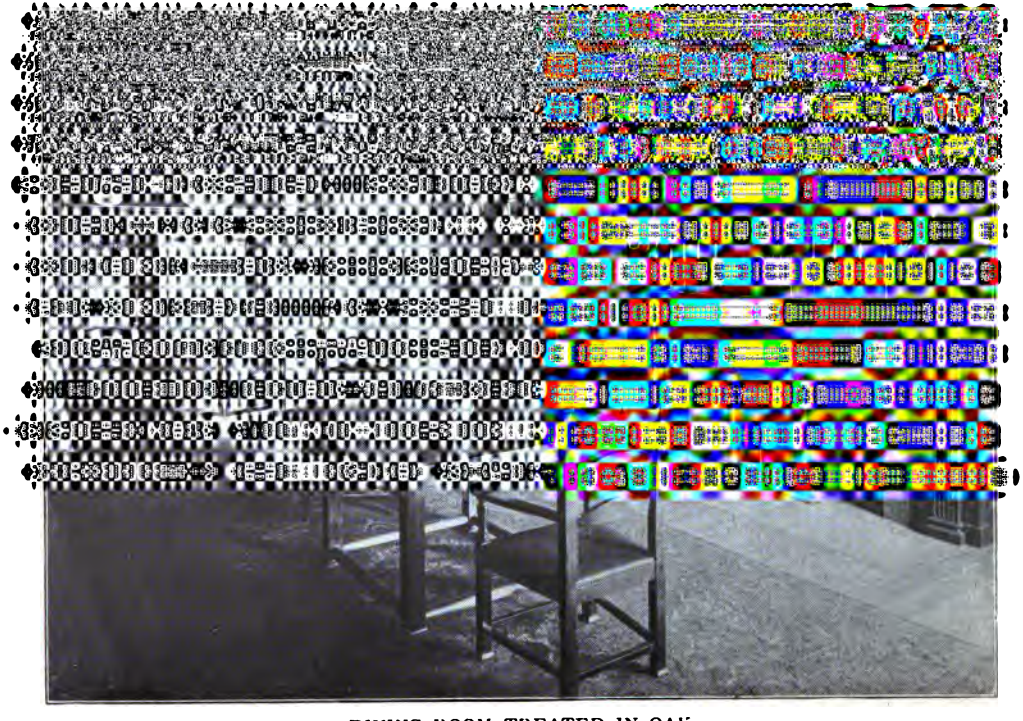
The Dining Room

Leather bottomed chairs are a desirable addition to a dining room, and burlaps may be used very successfully on its walls.

The kitchen furnishings should be such as can be kept clean easily. Linoleum seems to have the preference as a floor covering. Tiles are expensive, hard for those who must walk over them constantly and a hard wood floor is more difficult to keep in order than linoleum. A good piece of linoleum will last for years and its use dispenses with the scrubbing which takes so much time and energy. If the worker is careful to wipe up the spots immediately, the care of the kitchen floor is reduced to a minimum.

Kitchen Furnishings

In wall coverings, one has the choice of paper, calsomine, paint, enamel paper or oilcloth. Paint sometimes scales and its continuous use necessitates a number of coats which must finally be removed and this is



DINING ROOM TREATED IN OAK

Finish and Furniture after Modern English Style
Frank Chouteau Brown, Architect

a somewhat tedious and expensive process. Paper must be frequently renewed, the enameled paper is quite durable and can be wiped with a damp cloth; oilcloth stands this treatment still better, and for the woman who does her own work and does not wish to calsomine or paper her kitchen every season, it is perhaps the most satisfactory wall covering and it may be obtained in very attractive patterns and colors. Under present circumstances the kitchen may be a very attractive room and color schemes are as effective here as anywhere.

Placing of Fixtures

One feels inclined to turn aside for a moment from the purely decorative effects in the kitchen furnishing to plead for a careful placing of the essential furnishings, range, sink and work table, so as to keep the working space within small compass. The height of these same articles plays no small part in the comfort of the workers. Most kitchen sinks are too low, and however much the plumbers may insist that it is the "regular height", the mistress should see to it that it is made the height she finds convenient. It is a great waste of energy to be obliged to bend double in so simple a process as dish-washing.

The sink should be ample in size and the faucets set well up and back. Breakage is much more apt to occur in a narrow sink than in a broad one.

The Bedrooms

The bedroom is the place for individual expression such as is not attainable in the family room. The first requirement is a good bed; be the mattress hair, wool,

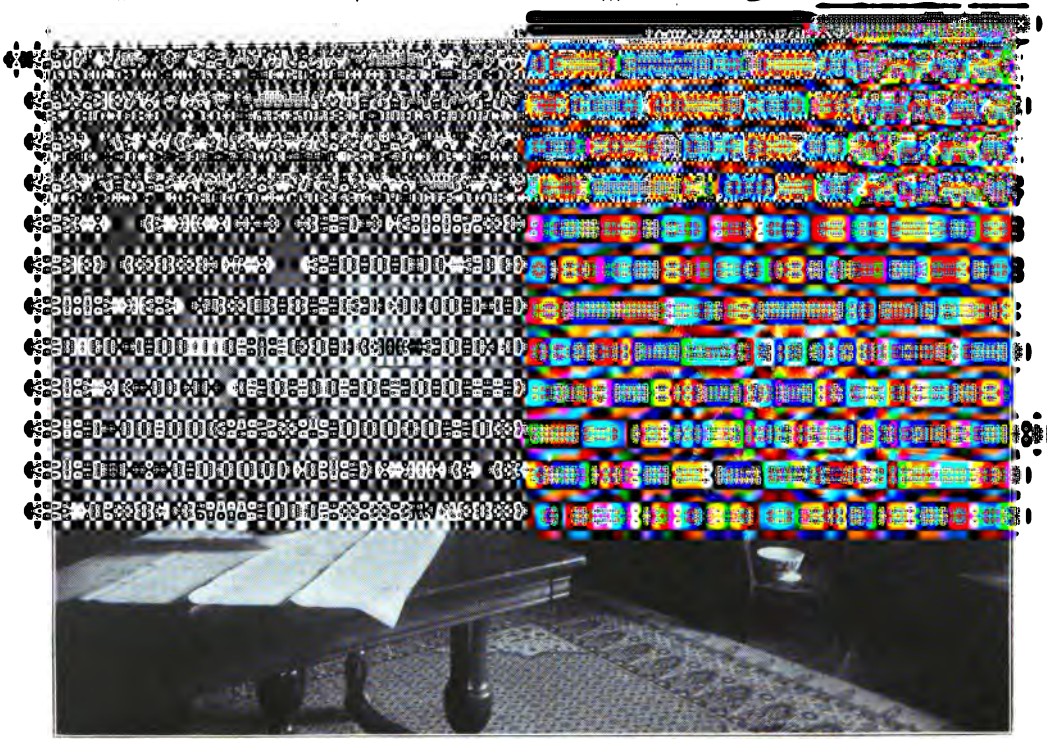
cotton or husk, it should be the best of its kind. Many people have a wrong sense of values in regard to bedroom furnishings. Much too large a proportion of the total expenditure goes for something other than the mattress, and yet one-third of a life is to be spent on the bed, so the mattress and springs should have the first consideration. A hard wood floor and a rug or two help to the simplicity which aids restfulness and to the cleanliness which is one of the most desirable elements in bedroom furnishings. Here is a chance for dainty belongings, for light and airy wall papers,—cool blues, greens and pinks—not with fantastic figures that dizzy and perplex by their intricacies. The bedroom is not to be a sitting room, but a sleeping room with perhaps an easy chair and one or two favorite books, beside the mirror and drawers in dresser or chiffonier. The bath room may relieve the necessity for a wash stand and thus save the trouble of caring for the articles it requires.

The Mattress

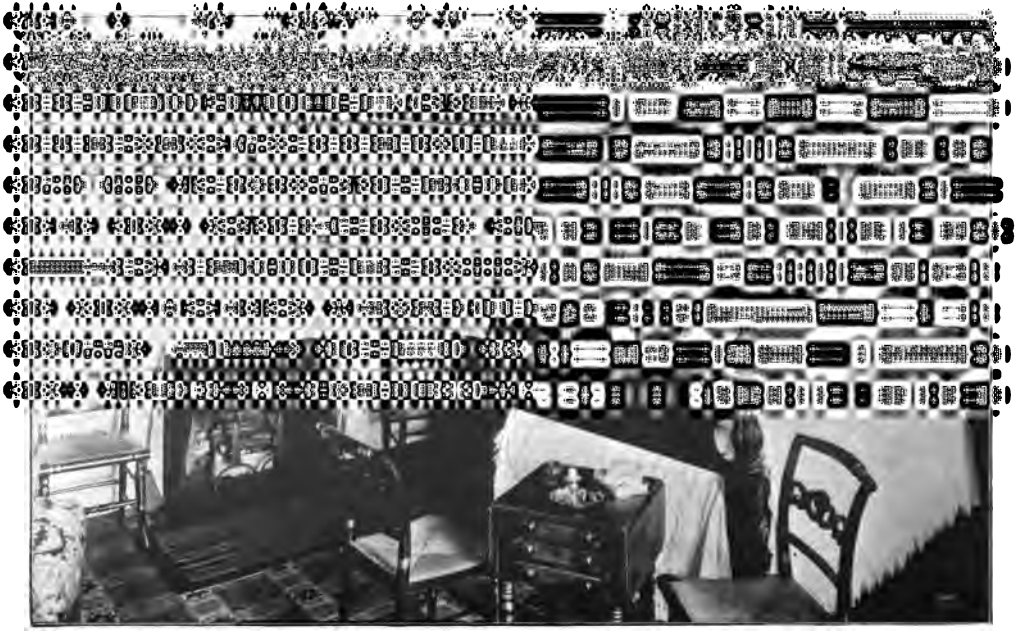
Bedroom Floor Covering

One has a large opportunity for choice in the matter of suitable bedroom floor coverings—mattings in great variety, fiber carpets, Berea rugs or the more expensive ones.

A very attractive bedroom can be made with white enamel paint, white iron bedstead and the Japanese matting with its blue figures and a blue rug. An old dresser may be quite transformed by a coat or two of white paint. Rattan chairs because of their lightness make good bedroom chairs



THE DINING ROOM IN HOUSE. PLAN No. 4, PAGE 66.



BEDROOM IN A RESTORED OLD COLONIAL HOUSE

Edmund Quincy Sylvester, Architect

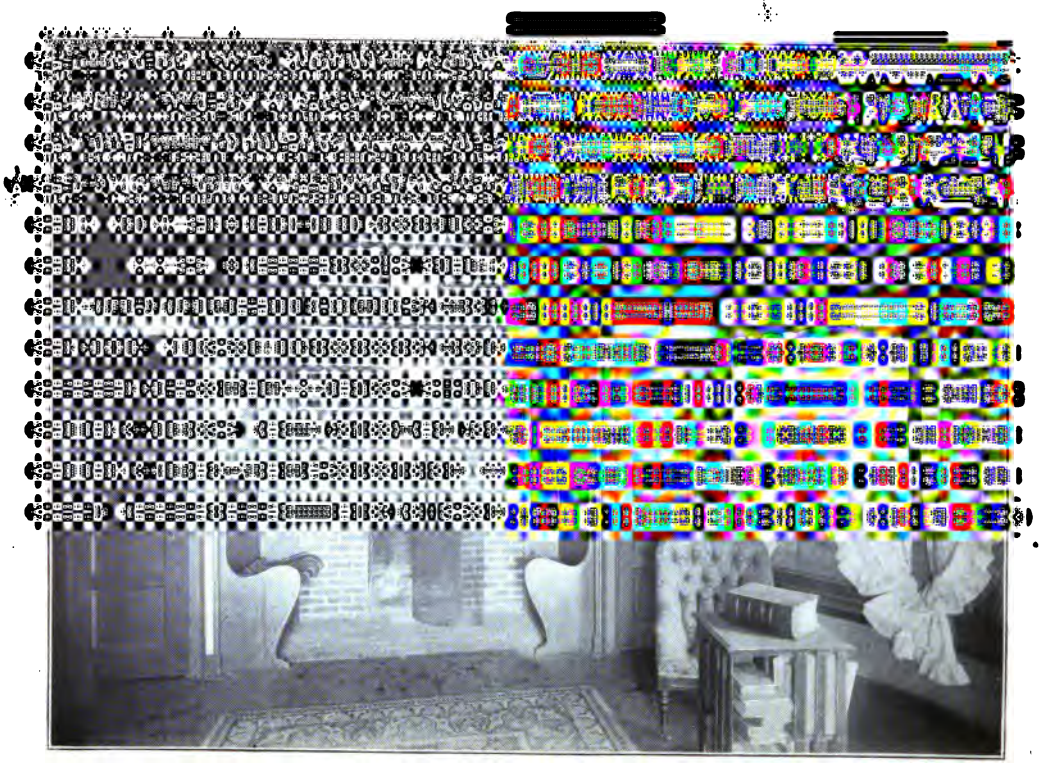
The bathroom is one of the most useful rooms of the house and can easily be one of the most attractive. Good plumbing, a commodious tub and a stationary wash stand are its most attractive furnishings. A hard wood or tile floor with a small rug, a wainscoting of wood, tile, or cement made to resemble tile, with paint or oilcloth above, give a good setting for the necessary fixtures. A small cupboard for the bathroom accessories, a larger one for the towels, a washable curtain, a good mirror and a towel rack complete the list of essentials. A desirable addition is the chute, by which the soiled clothes may be sent down to the laundry. Some very ugly bathrooms have been transformed by a generous use of white paint and enamel.

The Bathroom

DRAPERIES

A word should be said in this connection regarding draperies for they have a potent influence in making or marring the artistic effect of the room. If of the right color and suitable material they add much to the attractiveness of the room. A beautiful portière may serve as a picture in giving color and brightness to a dull room. In general their color should follow that of the walls. In order to give variety, if the walls are plain the curtain should be figured; while if the walls are covered with figured paper the curtain gives variety by plainness.

Color



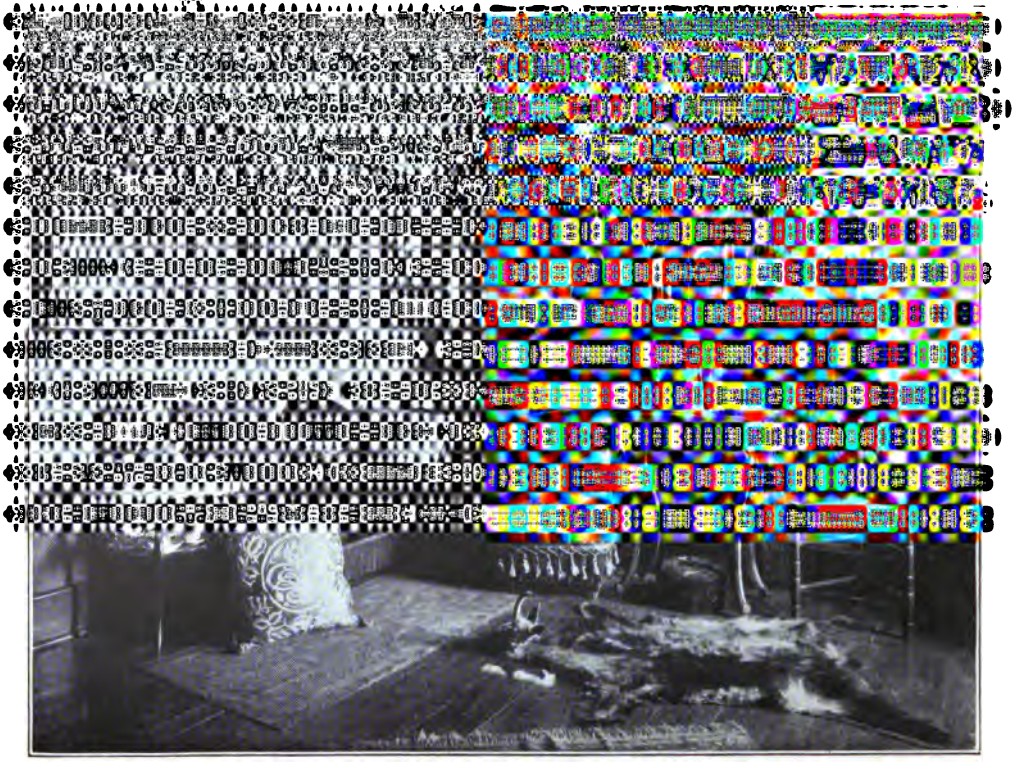
AN ATTIC ROOM IN HOUSE No. 4. MADE AN EXCELLENT STUDY.

Appropriateness

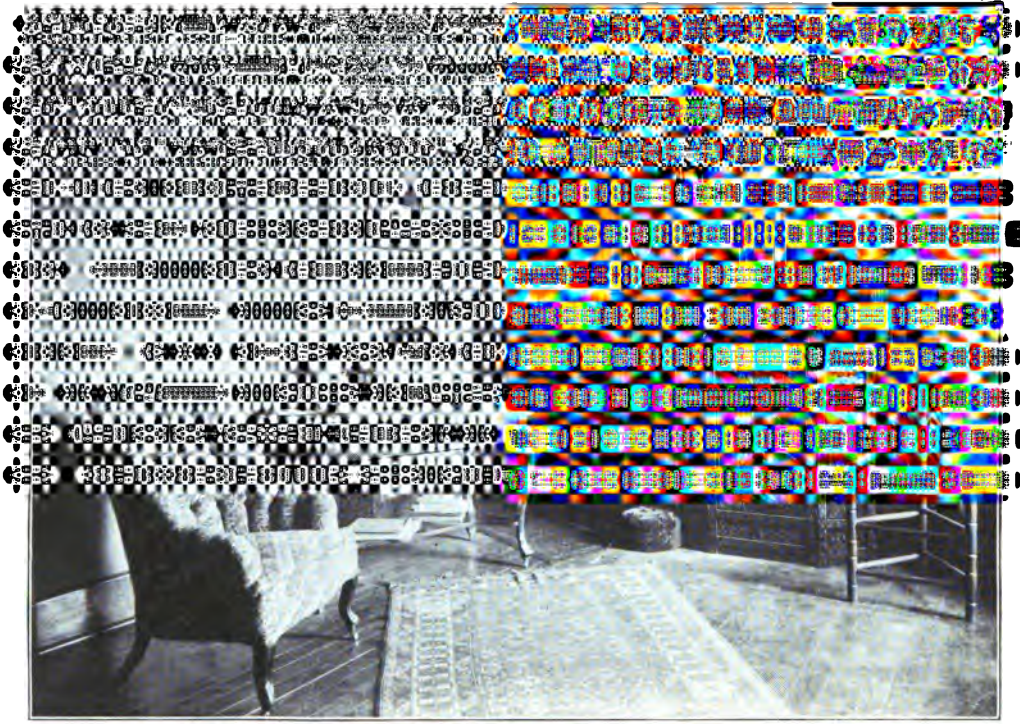
The law of appropriateness should be observed in regard to window hangings. Curtains do soften the lines and take away the bareness and stiffness from the room, but that fact does not make it desirable to have a double set of draperies in a living room. The family need the light, air, and sunshine which the hangings, particularly if they are heavy, shut out. We forget that the heavy hangings were used originally for the purpose of keeping out the wind and rain which entered through the openings cut in the walls of the castle.

Texture

Texture and quality are important factors in selecting draperies. Silk lends itself most easily to graceful folds, and wool comes next, but alas! woolen stuffs are a favorite haunt for moths. This leaves cotton and linen for inexpensive hangings and there is a large list from which to choose; chintzes, lawns, muslins, cretonnes, denims, Madras, hop-sacking and countless others. Chintzes have a large use in bedrooms and in summer houses. Denim is very much prized by some—in indigo blue it is apt to hold its color well; that and Turkey red are the two colors which are most nearly "fast" in cotton stuffs. Madras makes very pretty and effective curtains for those who are not so old-fashioned as to feel that nothing is quite so satisfactory as white. The fading of most of the cotton stuffs is a serious objection to their use. Mrs. Wheeler says in "Principles of Home Decoration": "There is a place waiting in the world of art



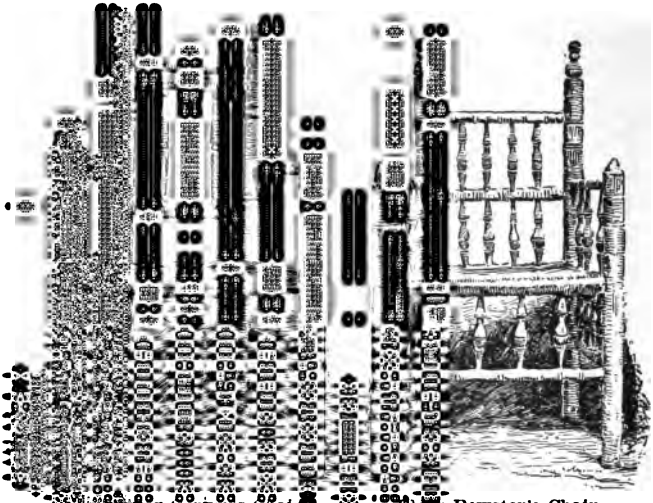
A ROOM CROWDED WITH FURNISHINGS.



THE SAME ROOM WITH SOME OF THE FURNISHINGS REMOVED.

(The large picture on the left hand wall is placed too high.)

[illegible] and I call the miss- [illegible] fabric of cost, for [illegible] ness that of cheap- [illegible] want it should



Bewster's Chair.

[illegible] CHAIRS.

[illegible] softness, and ab- [illegible] four qualities are [illegible] de".

FURNITURE

Draperies, furnishings and furniture are so closely related and so integral a part of decoration that it is difficult to tell in what order they should be considered.

We have treated of the wall and floor coverings first and left the separate pieces of furniture to the last on the supposition that in the furnishing of the new house that might be the order observed. One safe principle should guide in the buying of furniture,—avoid getting too many things. The average houses are crowded with pieces of furniture which serve no definite purpose and take space that could be better used.

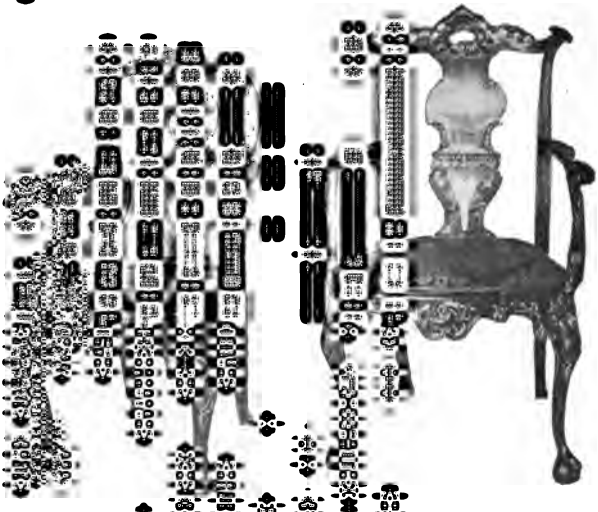
Helen Campbell in "Household Economics", says: "This reasoning holds good for every article of furniture; first, its use to man; second, its own laws of construction; third, its relation to the thousand needs of household life".

Our early models in furniture as in architecture were English. To them we are indebted for the designs which served as models for New England cabinet makers.

Out of the number of forms we select various styles of chairs as illustrating the types of furniture. Frances Clary Morse says in "Furniture of the Olden Times": "Forms and stools were used for seats in the sixteenth and early seventeenth centuries and inventories of wealthy men do not often contain more than one

[illegible] chairs were in

[illegible] chair makers of [illegible] pendale, Hepple-



[illegible] AIRS

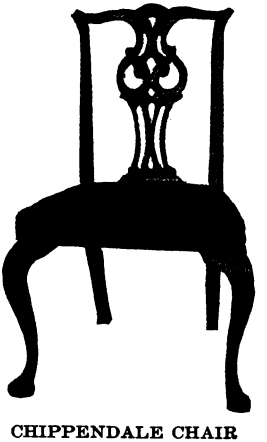
[illegible] ey Morse. Macmillan &

[illegible] seemed to have [illegible] ch in the way of [illegible] eveloped from the [illegible] om Chinese furni- [illegible] the French scroll [illegible] c is the bow form

at the top of the back; elaborate carving and fine proportion are his also.

Hepplewhite

Hepplewhite followed Chippendale. The Hepplewhite chairs are characterized by lightness. He used both carving and inlaying. The heart, oval, or shield shape back distinguishes these chairs. A specialty of Hepplewhite was to finish the chair backs with painted or japanned work.



CHIPPENDALE CHAIR WITH LEATHER SEAT.

Hepplewhite was followed by Sheraton, whose chairs retained many of the features of Hepplewhite's, but he sought to strengthen the chairs by a different construction of the back. He made the back rectangular in shape. The splats end in a rail which crosses the back a few inches above the seat.

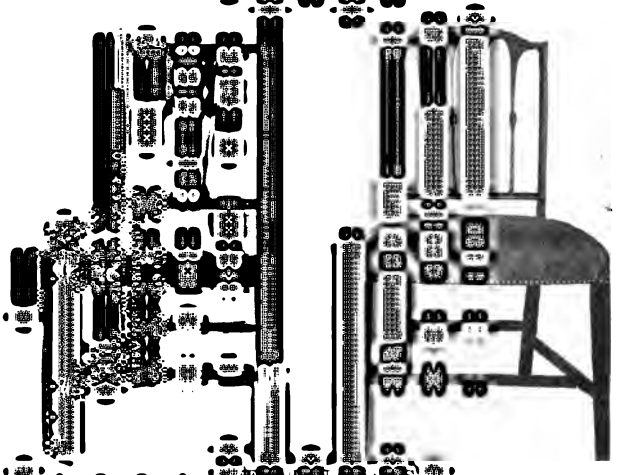
Windsor Chairs

The Windsor is another familiar type of chair which made its appearance in this country about 1730. Originally the Windsor chairs were painted green. The comb back Windsor chair illustrated is a Windsor writing chair said to have belonged to Thomas Jefferson.

HIPPLEWHITE CHAIRS.

ARM CHAIR

Furniture of the Olden Times.



Simplicity

[illegible] make for beauty [illegible] well as in [illegible]. The fashion [illegible] gilt and gold [illegible] ental for use [illegible] onstructed to [illegible] of any human [illegible] t of a child, [illegible] eme of heavy [illegible] niture, about [illegible] nd decorative [illegible] nately we are [illegible] d at present [illegible] s of the fact [illegible] nly desirable [illegible] ary that fur-

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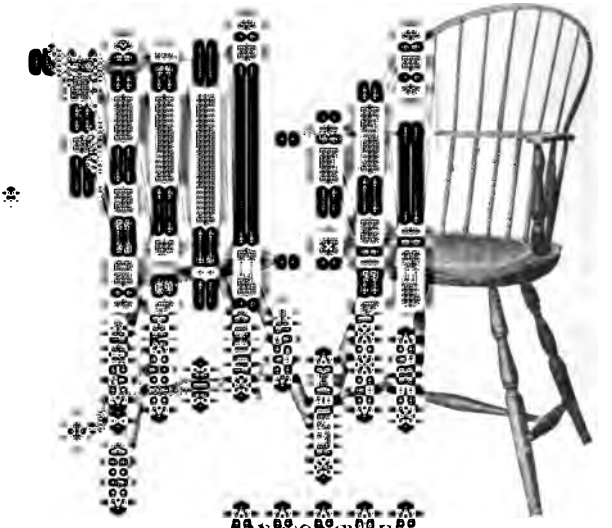

[illegible] ery and were often [illegible] d to color. Many [illegible] two pieces of un- [illegible] piece which really [illegible] The public taste is

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Comb-back Windsor Chair of Thomas

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Changes

However carefully a house may have been planned it is indeed rare that the result is perfect. Very many have not even the opportunity to plan for themselves and either buy houses built for others or are compelled by circumstances to live in rented houses. Remodelling a house that is hopelessly wrong is never a success, as the expense is oftentimes as great or greater than building anew. There are minor changes, however, which can be made at moderate cost.

It is always a good plan to have a carpenter or builder estimate the cost of any changes before beginning, and it will generally be found more satisfactory to have an architect plan alterations. If a house lacks a good broad porch or verandah, the addition of one will well repay the expense. Two seven by nine bedrooms with no closets had better be made into one fair sized bedroom and one closet.

More Windows

A window cut in the kitchen or dark corner or closet will frequently be found worth the cost. The addition of a bay window is less in vogue now than a few years ago, but if made in keeping and not "stuck on," may improve the appearance of the outside of the house and brighten up the room wonderfully. Window seats cost but little and may be found to add much to the comfort of a room.

New Wall Paper

For the money expended the change in wall paper will produce the greatest difference in the appearance

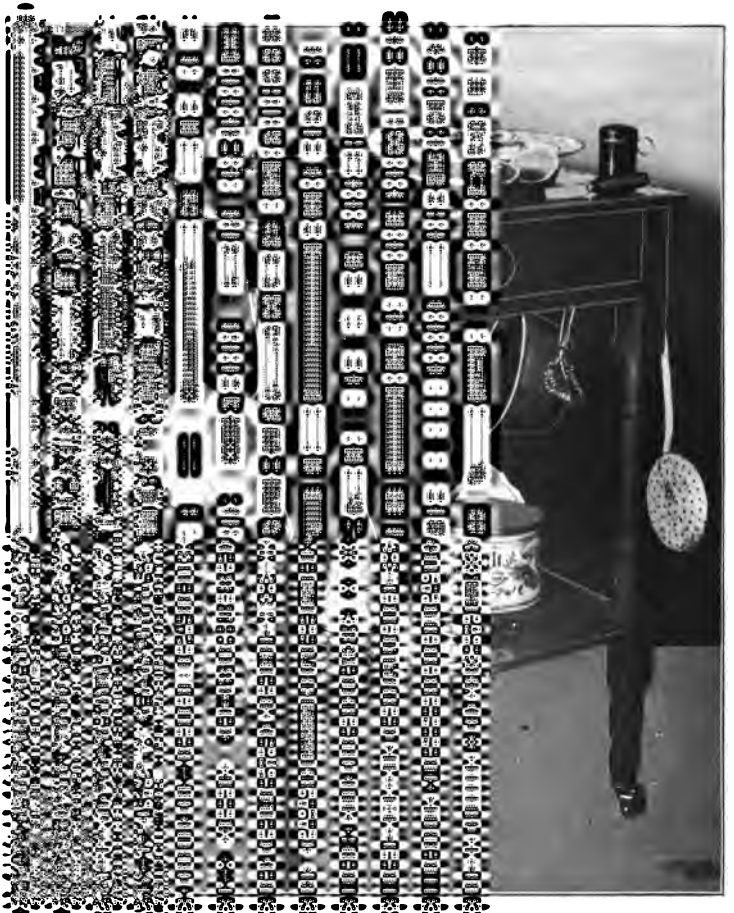
of a room. One never realizes the irritating and depressing influence of ugly wall paper until it is changed for the better. If over two layers of paper are on the wall, the old paper should be removed before putting on new, as the paste used may serve as an attraction for vermin and also make a very unsanitary condition.

Cost

It costs fifty cents a roll, more or less, to "hang" wall paper in addition to the cost of the paper itself, which may be from ten to fifty cents or a dollar or more a roll. A roll of paper will cover four square yards. Generous allowance must be made, however, for waste. The plain cartridge paper is very apt to fade as the coloring is simply a stain, while the figured papers are coated and printed with mineral colors or "lakes." The color of faded papers can be renewed or changed slightly by a thin coat of water color stain applied, of course, by one who has had experience. It sometimes happens that the fading of the paper adds to the harmony of a room.

Cleaning Wall Paper

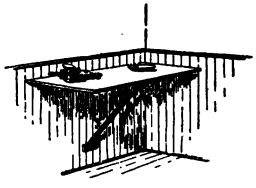
In sections of this country burning soft coal, the use of wall paper cleaner is very common, but it is not so frequently made use of in the eastern states. The most convenient kind of wall paper cleaner comes as a powder which, when mixed with cold water, makes a mass of rubber-like consistency with which the paper is rubbed vigorously. It will brighten soiled paper greatly; pencil marks, even, may be removed with it.



[illegible] ROLLERS
[illegible] Zinc Covered Top and
[illegible]
[illegible] Magazine.

A home-made recipe for cleaning soiled wall paper is as follows: Take a salt sack or make a small cheese cloth bag, partly fill it with ordinary flour and gently rub the paper. The flour will become dusty as the wall paper grows cleaner. A friend of the author makes bread dough, bakes it so that it is quite "doughy," and uses this for a wall cleaner with great success. She says it is much cheaper than the ordinary cleaner.

Happily the style for papering ceilings in figured designs is going out. A ceiling so covered may be painted with two coats of calcimine and thus the restfulness of the room helped.



A Drop Leaf Table.

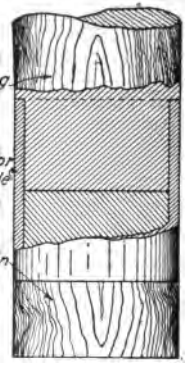
Painting

The staining and painting of floors has already been spoken of. The woodwork of a parlor may often be brought into better harmony with the rest of the room by coats of cream-colored paint. The last coat should be mixed with *good* varnish to give a more resisting surface. Ugly radiators and steam pipes can be improved by a coating of aluminum enamel.

Changes in the Kitchen

Most kitchens can easily be changed for the better. A drop-leaf table may be an added convenience. A table, preferably with two "stories" on rollers or castors, should be found in every kitchen. It should be small enough to pass through the doorways easily. It may

from one room to
nearer the stove for
and moved wher-
useful when one is
Almost all kitchen
of ordinary height.



METHOD OF LENGTHENING THE TABLE LEGS.

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ways present in the
s will require some
called in, as is gen-
not be moved, the
y soldering a short
old pipe, attaching
The water faucets

The Range and Fuel

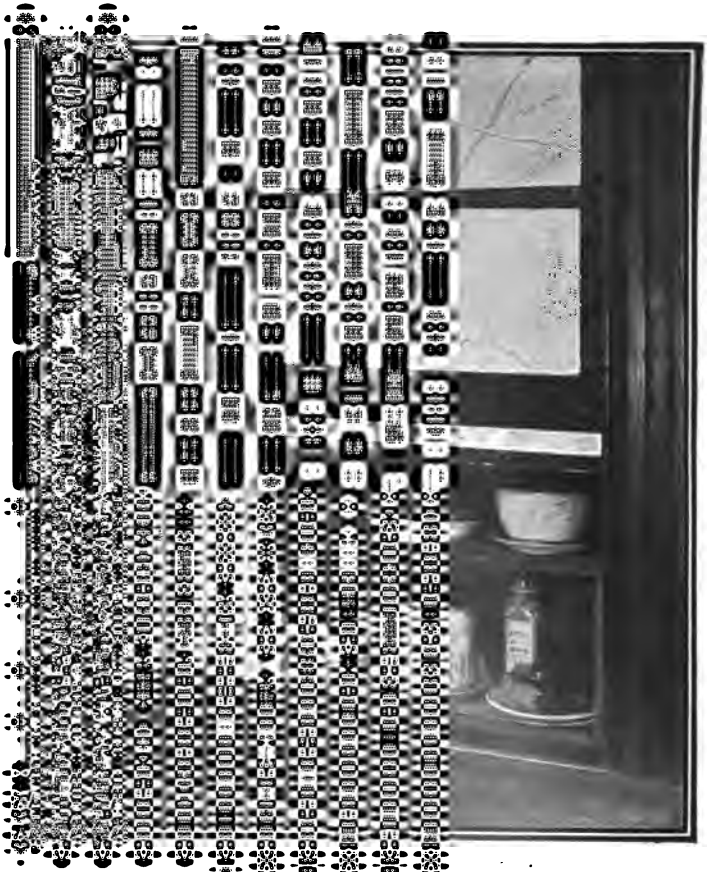
The position of the range may be changed at slight expense by lengthening the stove pipe; its height should be considered too. The fuel ought to be stored on a level with the kitchen. The amount of energy required to carry the coal from the cellar to the range and again to carry the ashes back to the cellar can be measured in tons and is energy entirely wasted.

The illustration shows a window cupboard for provisions to save steps to the cellar in cool weather.

Be the house new or old much of its attractiveness is due to the care bestowed on small repairs. The slatterly, neglected and generally run-down appearance of some houses is due to this neglect of small repairs. Broken door knobs, cracked window panes, scratched furniture that squeaks, doors that will not close, windows that will not open, are all real sources of discomfort in any home and yet are often found.

Repairs

In fixing any contrivance about the house, it is first necessary to make a careful diagnosis of the difficulty before the trouble can be rectified. This is a self-evident statement, but altogether too frequently very simple repairs remain undone because the trouble is not investigated. If as much ingenuity as is shown in fixing over a dress were used about the house many inconveniences would be rectified and dollars saved. Many minor changes and repairs can be very easily made. More hooks where needed, a convenient shelf, a small cupboard—perhaps made from a box—may be



A CORNER OF THE BOARD.
Reading for Farmers' Wives.

of great convenience in either the kitchen or bathroom. If the men of the family cannot be inveigled into doing these things, it is very simple to take the initiative.

Tools

Every household should include among its essential possessions provisions for removing these difficulties. Most of them can be disposed of by the use of tools, glue, furniture polish, or some simple chemical.

The tool box should contain a few ordinary tools, such as a hammer—two sizes preferable—a screw driver, gimlet, awl, pliers, a saw, a chisel, and plane. A key-hole saw is light and convenient. The hammer should bear some relationship in size to the nail to be driven. A large hammer and a small nail results in the proverbial bruised fingers. Even a carpenter cannot saw perfectly straight unless he draws a line to guide him.

Putting in Screws

In putting in screws, screw eyes and the like, especially in hard wood, it is first necessary to have a hole nearly as deep as the screw to be used. This should be made with a gimlet for large screws and an awl for small screws. There is then no difficulty in inserting the screw to its full length. Frequently a screw too large or too long is used when a small one will hold all weight required. The nails and screws that have accumulated are all that are to be found in most households. A few cents invested at a hardware store in nails, screws, hooks, etc., of assorted sizes will

prove a good investment and may remove the inertia which is so hard to overcome in making small changes.

The Repair Box

The repair box should certainly contain a bottle or tube of liquid glue for mending furniture and toys. A thin coating of glue will hold more securely than a thick one. Success in gluing is dependent on bringing the parts to be glued as near together as possible and keeping them in position until the glue sets. China which must be washed can be repaired by the use of thick shellac varnish. Although this has not as strong adhesive properties as glue, it will not dissolve in warm water, and pieces that one hesitates to throw away because of a small nick may be kept in use until serious accident happens.

Furniture polish, alcohol, turpentine and floor wax are useful in removing scratches and stains from furniture, floors, and woodwork.

Furniture Polish

A furniture polish recommended by an old furniture man consisted of equal parts boiled linseed oil, Japan drier, and turpentine. It should be applied with a *linen* cloth and rubbed until dry.

The care of the floors has been mentioned and that in general applies to the hardwood finish all over the house. Remember that in polishing, all woods should be rubbed *with* the grain. Weathered oak and mahogany furniture may be kept in the best condition by a weekly application of a pure oil, rubbed on well, always with the grain. To keep mahogany as did our forbears, good, hard rubbing is the essential.

Varnish Removers

Varnish may be removed, in preparation to revarnishing, by means of one of the many "varnish removers" to be obtained at any good paint store. These contain amyl alcohol, amyl acetate and other solvents which have a rather disagreeable odor, but they are not caustic and so are more convenient to use than caustic soda and other strong chemical varnish removers. The solvents soften the varnish which then may be easily scraped off with a knife or scraper.

Lacquer

The ornamental brass work about the house as gas and electric fixtures and some of the silver-plated ware is coated with a thin transparent varnish called "lacquer." This prevents the polished metal from tarnishing while it is intact. If the lacquer becomes scratched or damaged in any way the only method of helping matters is to remove the coating, polish the metal anew and apply a fresh coating of lacquer. The old lacquer is easily removed by alcohol. Shops having the proper polishing wheels for obtaining a good polish can accomplish this better than the housekeeper.

Wall Paper Repairs

Wall paper which has been marred by staining or otherwise can be repaired by patching a carefully matched piece over the offending damage, or if the paper be simply rubbed off in small spots, as happens in moving furniture and trunks, a small brush dipped in water will remove the coating of a small bit of the paper and the white spot of plaster can be touched up so as to be unnoticeable.

Care of Rugs

Rugs should not be whipped unless laid flat on the ground. They never should be hung over a line. All rugs improve in glossiness and beauty under proper treatment. Cheap or expensive, they should be swept in the direction they were woven, which may be ascertained by putting your hand over them and feeling which way the nap runs. It ruins Oriental rugs to sweep them in the wrong direction, and small rugs should be brushed with a whisk broom in preference to sweeping them.

Marble

Marble and tiling should be washed with a soft cloth, soap and water. Avoid acids on either; to marble they are destructive. Porcelain tubs can best be cleaned with kerosene and clear water. If the marble bowl is stained, whiting will clean it better than a sand soap, which scratches it.

Matting should be swept, then wiped with a damp cloth, never wet.

Washing Windows

When washing windows, first remove the dust, both outside and in, with a dry, soft cloth. Clean the corners and grooves with a skewer, covered with a cloth. Wash with clean water and ammonia, using plenty of soft, clean cloths, and *polish* dry. Do not wash windows when the sun is shining on them.

Painted Wood-work

Painted wood-work requires care. Paint is softened by wet alkalies, such as ammonia, potash, or borax. Clear, warm water, or whiting and cold water, should be used. The enamel finish is most easily cleaned with clear, warm water. Whiting will remove

the ordinary spots on the wood-work; if stained, alkali will perhaps have to be used and the place re-painted.

Plaster

Plaster of Paris should be kept on hand as it is convenient for filling up cracks and mending various articles. As it hardens very quickly, some deftness is required in using it. A very little vinegar added to the water will keep the plaster from hardening quickly.

Eternal vigilance in little things is the price paid for small repairs. One must feel it is worth while to mend a broken lock, or oil a squeaky door, or polish the furniture, if one would keep the house looking well.

HOUSEKEEPING

Housekeeping as a Profession

A word more instead of a section must be said in closing about the care of such a house as is described in these pages. Happily the days are passing when the feeling prevails that "anyone can keep house." We have been a long time in learning that housekeeping is a profession for which intelligent preparation is demanded. The woman who attempts to usurp the authority of the trained nurse in charge of the patient does so at the risk of the patient's life. Results quite as disastrous to the life of the household may be expected from the woman ignorant of the first principles of household management and care.

Proper care of the house implies:

Essential

1. An intelligent conception of the construction of the house.

2. Some acquaintance with appliances for heating and lighting.

3. A knowledge of the sanitary aspects of plumbing.
4. A knowledge of values relative and absolute.
5. A knowledge of materials used in the home.
6. That attitude of mind which finds pleasure and satisfaction in a well cared-for house.

The Mistress of the Home

The leader of the orchestra must understand the various instruments if he would blend their tones in a pleasing harmony; so the mistress of a home must have some definite knowledge of the machinery of its various parts if she would manage them successfully. It is worth while to know enough about the heating system to save an explosion by simply opening a valve, worth while to know enough about the furnace to be able to save fuel by closing the drafts, worth while to be able to buy intelligently the food, silver, china, linen, and glass needed in a home that the money, of which there is rarely an abundance, be not squandered for poor materials.

Drudgery

The woman who announces that housekeeping is drudgery and that she keeps as far away from it as possible, thus confesses that she has been unequal to her task. To such it must ever be drudgery, but to her who understands the possibilities and satisfaction in a well-ordered house and gives herself to a conscientious and intelligent study of its problems, it gives an insight into and an understanding of people and things; it provides a place for the application of science, economics, ethics and aesthetics and yields the satisfaction of achievement and the gratitude and love of those who have shared the benefits of such a home.

TEST QUESTIONS

THE HOUSE

Its Plan, Decoration and Care

PART III

Read Carefully. Place your name and address on the first sheet of the test. Use a light grade of paper and write on one side of the sheet only. Leave space between the answers for the notes of the instructor. *Use your own words* and answer fully Read the lesson paper a number of times before attempting to answer the questions.

1. Name the points to be considered in the construction of the house.
2. What devices for fire protection are there?
3. Define stud, sill, plate, girder, rafter.
4. What kind of floor for living room do you prefer? Give reasons for your preference.
5. Where should the decoration of a room begin?
6. What do you consider the most important factor in the furnishing of a room?
7. What principles should govern in the selection of the furnishing and furniture of a room?
8. Give a scheme for color and furnishing of a living room (15x25 ft.) with low ceilings, west and north exposure, varnished hard pine for its wood.
9. Give color scheme for a kitchen with covering for walls and floor and the location of the essential furniture.

10. What can you say of draperies?
11. Give the distinguishing characters of some of the best known types of chairs.
12. What seems to you the greatest difficulty in the care of the house? Why?
13. What do you regard as essentials in bedroom furniture and furnishings?
14. Suggest changes in the house most familiar to you which could be made to advantage and at small expense.
15. What suggestions have you to offer concerning household conveniences?
16. Are there any questions you would like to ask relating to "The House"?

NOTE.—After completing the test, sign your full name.

SUPPLEMENTAL PROGRAM FOR CLASS STUDY

ON

THE HOUSE, ITS PLAN, DECORATION, AND CARE

By Isabel Bevier, Ph. M.

MEETING I

(Study pages 1-20.)

Evolution of the House.

Woman's Share in Primitive Culture. Chapter I. ($1.75, postage 16c.) O. T. Mason.

Household Economics. Chapter II. ($1.50, postage 16c.) Helen Campbell.

Evolution of the Home. Vol. X, Page 509. Andover Review.

The Dwellings of Primitive Man. House Beautiful, January, 1904.

Quiviras and the Wichita Grass Houses. Harpers, Vol. 99, p. 126.

The House Beauiful. ($0.50, postage 6c.) W. C. Gannett.

Topics: Place of Architecture in Civilization
Relation of Architecture to History and Art
The Home as the Center of Life

MEETING II

(Study pages 20-47.)

Development of the American House.

American Renaissance. ($4.00, postage 30c.) Joy Wheeler Dow.

Cost of Shelter. Chapters I and III. ($1.00, postage 10c.) Ellen H. Richards.

Early Connecticut Houses. ($4.00, postage 24c.) Isham and Brown.

Homes in City and Country. ($2.00, postage 18c.) Sturgis, et al.

Stately Homes in America. ($7.50.) Chapters 2, 3 and 4. Desmond and Croly.

House Beautiful. ($2.50, postage 20c.) Introduction. Cook.

Beautiful Houses. Chapters 1 and 2. ($2.50, postage 24c.) Gibson.

Evolution of Domestic Life in America. House Beautiful, Vol. XII, p. 281.

Topics: Description of a Colonial House (of the neighborhood)
The Apartment House as Affecting Family Life
The House of the Future.

(Select answers to test questions on Part I. and send them to the School.)

MEETING III

(Study pages 49-98.)

(a) The Modern House.

Household Economics. Chapter III. ($1.50, postage 16c.) Helen Campbell.

Home Economics. Chapter I. ($1.50, postage 16c.) Maria Parloa.

The Cost of Shelter. Chapter V. ($1.00, postage 10c.) Ellen H. Richards.

(b) House Planning.

How to Build a Home. Pages 1-10. (Out of print.) F. C. Moore.

Home Economics. Chapter I. ($1.50, postage 10c.) Maria Parloa.

House that Jill Built. ($1.00, postage 10c.) E. C. Gardner.

House Planning. ($1.00, postage 8c.) Osborne.

The House Book. ($1.50, postage 14c.) Kline.

The Book of One Hundred Houses. ($3.20, postage 16c.) From The House Beautiful.

Collect plans from The House Beautiful, The Craftsman, Delineator, Ladies' Home Journal, Architects' and Builders' Magazine, Architectural Record, Etc.

Topics: House Analysis, or Where to Begin in Planning.
The Aesthetic Side of House Planning, or Residence Design.
The Ideal Kitchen.

(Select answers to test questions on Part II.)

MEETING IV

(Study pages 101-102.)

(a) Construction of the House.

The Farmstead. Chapters 6 and 8. ($1.25, postage 12c.) Roberts.

Article by F. C. Brown, March, April, and May, '06, Good Housekeeping.

Stairs, Windows, Floors—See series in House Beautiful, 1905-1906, R. C. Spencer.

(b) Floors.

Care of House. Chapter 12. ($1.50, postage 16c.) T. M. Clark.

Home Economics. Chapter 12. ($1.50, postage 16c.) Maria Parloa.

Topics: Cost of Building.
Woods Used in House Building.
Outside Finish.

MEETING V

(Study pages 123-151.)

(a) Decorating and Furnishing.

Kinds of Art. "Household Economics." Chapter V. ($1.50, postage 16c.) Campbell. Also see Encyclopaedias.

Principles of Home Decoration. ($1.80, postage 16c.) Candace Wheeler.

Art of the House. (Out of print.) Watson.

Claims of Decorative Art. (Out of print.) Walter Crane.

Household Art. Progress of American Decorative Art. ($1.00, postage 10c.) Wheeler.

Household Art. Limits of Decoration. Wheeler.

Hopes and Fears for Art. ($1.25, postage 12c.) William Morris.

Beginnings of Art. ($1.75, postage 14c.) Grosse.

Philosophy of Beauty. (Two parts, each $1.00, postage 10c.) Knight.

(b) Household Decoration.

Household Economics. Chapter 6. ($1.50, postage 16c.) Campbell.

Decoration of Houses. ($2.50, postage 20c.) Codman and Wharton.

Homes and their Decorations. ($3.00, postage 26c.) L. H. French.

Color Harmony and Contrasts. ($4.20, postage 16c; printed in colors.) James B. Ward.

(c) Furnishings and Furniture.

Household Economics. Chapter 6. ($1.50, postage 16c.) Campbell.

Furniture of Olden Times. ($3.00, postage 24c.) Alice Cary Morse.

See Magazines—Country Life in America, Harper's Bazar, House Beautiful, etc.

Topics: Elimination in Furnishings
The Setting for the House or the Surroundings.
Curtains—Their Use and Abuse.

MEETING VI

(Study pages 152-165.)

(a) Care of the House.

Home Economics. Chapters 14-16. ($1.50, postage 16c.) Maria Parloa.

Care of the House. Chapter 12. ($1.50, postage 16c.) Clark.

(b) Conveniences.

Convenient Houses. Chapters 1, 2, 5 and 6. ($2.50, postage 24c.) Gibson.

See Magazines.

Topics: Rugs and their Care. See Rugs, Oriental and Occidental. ($3.50.) Rosa Bell Holt; and Oriental Rugs. ($7.50.) J. K. Mumford.
The Town Beautiful, or Village Improvement.
Home-making as a Professsion.

(Select answers to test questions on Part III.)

Note.—For further references and topics, see syllabus on Shelter, prepared by Lake Placid Conference on Home Economics. Price 5c, of the School.

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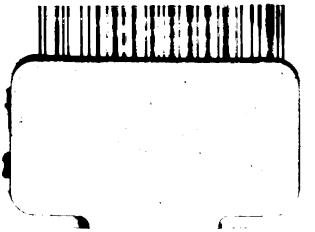

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